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Worldwide Report

TELECOMMUNICATIONS POLICY, RESEARCH, AND DEVELOPMENT

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6 November 1985

WORLDWIDE REPORT

TELECOMMUNICATIONS POLICY, RESEARCH AND DEVELOPMENT

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AUSTRALIA

AUSSAT OFFICIAL INTERVIEWED ON SATELLITE CAPABILITIES

BK150435 Melbourne Overseas Service in English 0210 GMT 14 Oct 85

[Interview with AUSSAT official Dr Mark Howard in Sydney by "Talkback"
program moderator Judy Cooper--date not given]

[Excerpt]

[Cooper] What are the frequencies that AUSSAT is running on?

[Howard] AUSSAT runs in what is called the KU band. We receive signals between 14 and 14.5 ghz, that is 10 to the 9th herz, and we transmit on the band 12.25 to 12.75 ghz.

[Cooper] And the footprint is staying pretty much within Australia, or is it spilling over?

[Howard] Well, that is an interesting question. The AUSSAT antenna coverage is a particularly complex one. In fact the AUSSAT system is one of the most complex satellite systems ever made. We provide four contiguous spot beams across Australia that cover four regions. There is Western Australia, the central Australian beam which combines the Northern Territory and South Australia, there is a northeastern beam which covers principally Queensland, and the southeastern beam which will cover New South Wales, Victoria and Tasmania. In addition to that we provide dedicated coverage for both up and down links over Papua New Guinea as well as providing beams which cover the whole of Australia--there are two national beams for both transmit and two for receive. So you can see we have a very complex pattern of beams, but they are principally designed to cover the Australian mainland and Papua New Guinea. In addition to that on our third satellite, which is due for launch around the middle of next year, we have made a small addition there is that we can now provide dedicated up and downlink beams to cover the Southwest Pacific island nations.

[Cooper] If any of the people out there are looking for the B-MAC system, but in another mode, what is it going to sound and look like?

[Howard] Well, unfortunately, if they don't have a B-MAC receiver they really won't be able to receive the signals at all. The B-MAC signal form is totally different to conventional PAL or NTSC television. So, if you tried to pick up the B-MAC signal using a conventional TV set the result would look something like a scrambled video picture, and there would be no sound at all.

[Cooper] So it can't be received in another mode?

[Howard] No. You really have to purchase a B-MAC receiver to be able to receive any of those signals.

[Cooper] When will the first commercial traffic start?

[Howard] Well, we hope very shortly. In fact just toward the end of this month we will be providing the ABC [Australian Broadcasting Corporation] Remote Area Television Service uplinks through the AUSSAT satellite to enable a changeover to be made in the remote areas from the existing INTELSAT service across to AUSSAT. When that is completed that will herald the inauguration of the new HACBSS service. This is the Homestead and Community Broadcasting Satellite Service, which produces that rather awkward acronym HACBSS.

CSO: 5500/4307

JAPAN

NTT TO BEGIN PERSONAL COMPUTER COMMUNICATION TEST

OW191127 Tokyo KYODO in English 1035 GMT 19 Sep 85

[Text] Tokyo, 19 Sep (KYODO)--Nippon Telegraph and Telephone Corp. (NTT) said Thursday it will begin large-scale trial communications services between personal computers in November. NTT said it will set up a special facility in Tokyo for the test run which is to last till September next year, allowing participating enterprises and individuals to communicate with each other through personal computers.

The NTT's test run is expected to speed up moves to personal computers communications as other companies such as NEC Corp. and ASCII Corp. are preparing for similar action.

NTT said about 320 companies and about 80 individuals have already applied for participation in the test. At present, nearly 4 million personal computers are in use in Japan. Participants will be required to use 16-bit computers and an adapter and to pay for communication fees.

In addition to communications between personal computers, NTT plans to test connections for communications between personal computers and larger computers and electronic mails.

CSO: 5560/011

PEOPLE'S REPUBLIC OF CHINA

BRIEFS

ERICSSON AXE EXCHANGES TO LIAONING--Ericsson has received an order worth 235 million kronor from China. This is the largest single agreement a Swedish industrial company has ever signed with China. The agreement covers the production and installation of 11 AXE telephone exchanges for about 100,000 customers. "It is gratifying to reach an agreement after 1 year of intensive work," said Ragnar Back, director of sales at Ericsson. Ericsson has now signed six agreements with China this year. "We have installed a total of 50,000 lines in China and 200,000 lines are on order," Ragnar Back continued. Ericsson was given the contract after stiff competition with Japanese, European, and American telephone manufacturers. The new agreement was signed with Liaoning Province in northeastern China. Ericsson lost a large contract in Beijing late last year. The company was unable to offer the same credit conditions as the French company CIT-Alcatel. Financing of the new agreement is under discussion. China is a large future market for telephones. The country now has 0.5 telephones per 100 inhabitants. The number of telephones has doubled in 5 years. Sweden has 70 telephones per 100 inhabitants. China, which now has about 5 million lines, intends to have 35 million lines by the year 2000. "It is difficult and time-consuming to work the Chinese market. The negotiations are decentralized, so we must work each individual district. We have been approved as a manufacturer by the Chinese authorities. We are working to obtain more orders in the future," Ragnar Back said. Ericsson has gradually built up its Chinese market. That country is a major customer and Ericsson opened its own office in Beijing last spring. The first telephone installed in China 90 years ago came from LM Ericsson. [Text] [Stockholm DAGENS NYHETER in Swedish 27 Aug 85 p 10] 9336

CSO: 5500/2860

PHILIPPINES

COMMUNICATIONS MINISTER DISCUSSES TELECOMMUNICATIONS DEVELOPMENT

Manila BULLETIN TODAY in English 6-8 Oct 85

[Speech by Jose P. Dans, Minister of Transportation and Communications, delivered at the 17th Session of the Asia Pacific Conference & Exhibition on electronics communications held in Seoul, Korea, Sept. 17-19, 1985 upon the invitation of the Armed Forces Communications and Electronics Association, an organization of 550 corporate members and 30,000 individual members from 65 countries: "RP telecommunications yesterday, today & tomorrow"]

[6 Oct 85 pp 7, 20]

[Text]

THE Philippines is unique in the world, in terms of its telecommunications system. Most countries, both developed and developing, have evolved telecommunications networks that are monopolies, owned and operated by either government or a private company. In contrast, the Philippines, a country of over 50 million people and 7,107 islands, is an amalgam of public and private telephone systems. Today, the country has some 55 telephone companies. Seven domestic record carriers, four international record carriers, and two satellite systems (domestic and international), with some of the record carriers having franchises for voice transmission.

In spite of this proliferation of carriers, less than four percent of the 1,599 cities and towns are serviced by the telephone companies, in contrast to the 1,373 or 85 percent serviced by the domestic record carriers. However, private record carriers service only 304 or 19 percent of these cities and towns, while the government record carrier serves all 1,373, under a highly subsidized system that, last year, was rated by the Ministry of Transportation and Communications as being operational less than 60 percent of the time.

The situation has been labelled as the classic results of "free" enterprise imposed on a poor economy, theories that postulate that "what is mine is mine; what is yours could be mine." It is a legacy of 50 years of a benign American colonialism that benevolently tried

to impose its Protestant morals, concepts and ways of life on an ethnically Malayan nation, which it had "liberated" after four centuries of Spanish colonialism, which had, in turn, exploited the land and overlaid its Catholic laws and religion over a basically pagan people. The enforced mix of "twains" that were never supposed to meet, over the span of four hundred and fifty years, produced a beautiful people, retarded an agricultural economy, and evolved a befuddled democracy.

In addition, almost five years of a sanguine Japanese occupation further confused an already disoriented ethic and ravaged a helpless country. Where "Thou shalt not kill" was primordial, the enemy was the exception. Where "Thou shalt not steal" was sacrosanct, the enemy was the exclusion. Excesses were built and the "law of the gun" was as approbative and as feared as the Ten Commandments. Punishment by one certainly came swifter than the other.

The years of independence

Against this perplexing social, cultural, and economic milieu, the country was granted its political independence. This independence, as the "twenty-twenty hindsight" historians stress, was principally political and not economic. But not being economic, it could not have been political.

In the telecommunications micro-sector, the vestiges of the "free" enterprise, that was instituted prior to the war, remained. The giant American company, the Philippine Long Distance Telephone

Co. (PLDT), remained the giant American company until 22 years after, when it was bought out by a group of Filipino entrepreneurs, in 1967. The international record carriers were dominated by Globe Mackay, RCAA and ITT, until Philippine laws required them, in 1975, to sell a majority of their shares to Filipino stockholders.

Without intending to disparage any one, the free enterprise principle found a well disposed and gullible second home in the Philippines. While rates were fixed, any one could go to Congress and secure a franchise. The granting of franchises and the franchises themselves were liberal. Tax exemptions from almost all taxes were secured, limited monopolies were granted and little or no conditions of service were imposed. In addition to all these, there was no single government office that planned effectively for telecommunications, including broadcasting and frequency assignments. Neither was there any agency, with sufficient authority to ensure that these franchises and their conditions were complied with. At the turn of this decade, only 80 of about 170 telephone exchanges were interconnected to the national backbone network that PLDT owned and operated.

This unregulated "free" enterprise approach may have been good for a strongly based company, one with excess resources at hand and one that could afford to literally waste these resources, in order to evolve a strong sector. But applied to a poor country, with a weak economic base, the results were appalling.

The year 1946 and thereafter saw the evils that both ends of the economic spectrum are so fearful of. Competition killed off and dissipated capital investments that could well have been placed in other productive enterprises. Monopolies resulted in the poor delivery of service, that allowed short term corporate gains to disregard the long term requisites of public service. The intervening years after, saw the rise of a number of telephone companies record carriers and their fall. Government, which had the predisposition to look at telecommunications as a luxury, did not see any need to regulate it too closely.

So much so that those companies, with strong management teams, were then able to take advantage of this situation and grew stronger. The weak ones, including many of the larger exchanges in the government telephone system, died by the wayside. In Metro Manila, there were two giant telephone companies, both of which contributed to the death of a large government telephone system, after three years of unsatisfactory performance. By the end of the seventies, there were still a number of survivors. These were the few very big ones, grown strong by their almost unregulated expansion. And there were the many very small ones that nobody really wanted or minded and that continued servicing with the poorest, if not the most obsolete, of equipment.

The coverage of telephone services for the country, by any standard measure, was frightfully low. In 1983, the overall telephone density of the country was ranked fourth among its ASEAN neighbors, with a dismal 0.88 telephones per 100 population, versus a 32.9/100 for Singapore, a 3.9/100 for Malaysia, and a 1.1/100 for Thailand. In the Asian region, Japan already had 35.9/100, Australia 37.2/100, Hong Kong 28.2/100, Taiwan 16.5/100 and

South Korea 10.6/100. In the mid-fifties, its is recalled that both Korea and the Philippines had the same density of about 0.6 telephones per 100 population. And today, Thailand and Indonesia are on the verge of substantial telecommunications projects, that will double, or even triple, their telephone densities over the next five years.

The low telephone density of this country is a microcosm of the international situation. The immense disparity in the extent of telecommunications service and in its quality, as between industrialized countries and the developing world, is reflected in the distribution of these services in the world today. In 1981, 470 million telephones or 92.6 percent of the telephones served 1.2 billion or less than 30 percent of the people of the developed countries, against only 38 million or 7.4 of the telephones for almost three billion or over 70 percent of the people of developing countries. In telephone density, this meant a 39/100 and 1/100 telephone density, for the developed and developing countries, respectively.

In the Philippines, 1983 figures indicate that, of the 1,599 cities and municipalities in the country, the major urban areas, with 12 million people or about 22 percent of the total population, had a relatively high telephone density (4.77/100 for Metro Manila and 3.04/100 for other major urban areas). There was a virtual absence of telephone service

elsewhere in the rural areas (0.18/100), for almost 43 million people. The size of the waiting list was reported to be equivalent to approximately 40 percent of the lines in service. This mean that the actual total demand potential was much higher, since the waiting list only reflected that portion of the population of the country, already with telephone service. This, therefore, excluded the unsatisfied demand of those cities and municipalities, still without telephone services.

The telecommunications decade

The telecommunications decade for the Philippines has preceded the ESCAP sponsored "Transportation & Telecommunications Decade" by six years. In July, 1979, the President of the Philippines, by executive order, created a Ministry of Transportation & Communications. Previous to this, the transportation and communications sectors were only a part of the Ministry of Public Works. And considering the heavy requirements, of a new republic, for schools, hospitals, roads, bridges and other infrastructure, these two sectors were sadly neglected.

The creation of the Ministry thus underlined the intention of the national leadership, to concentrate on the dynamic and institutional aspects of transportation and the much neglected telecommunications sector. In spite of this move by the government, the national priority for telecommunications remained low. The food, housing, transportation, infrastructure, water and energy sectors will stand out as the major areas of concentration for the country.

In early 1980, the new Ministry, together with a just as newly created regulatory agency for telecommunications, the National Telecommunications Commission, started to evolve what is now a serious national program. A survey of the existing telephone network and systems indicated the dire conditions of the sector. Moreover, this program had to be adjusted to ongoing projects, already in the pipeline.

The policy of ownership

A review of the past only confirmed the necessity of economies of scale in telecommunications. Requiring huge capital investments, it found none in the capital investment market. Those, who dared enter this field with a paucity of capital, found themselves either slowly inched out of the way or, if left alone, incapable of rendering the minimum of "plain old telephone service." This, plus the fact that a majority of the telecommunications system was in private hands, posed a dilemma to government.

Already strapped by high interest investment funds that could no be recovered soon enough, a "chicken and egg" situation soon developed for the telephone companies. Realizing this, government, confirming the role of the private sector in

the operations network, enunciated the policy that, where necessary, government would make the required capital investment and the private sector would manage the operations.

The integration approach

At the outset, the most likely approach, to improve the telecommunications sector, was to merge the existing telephone companies, through corporate mergers and buyouts. This, it was agreed, would achieve a synergy, without the need for immediate additional capital investment. The two largest firms, operating in Metro Manila seemed to be the best proponent to test this concept.

After almost a year of very quiet negotiation, with the Ministry as broker, the PLDT, a very reluctant buyer, bought out the assets of its biggest rival and, in the process, controlled 92 percent of all the telephones in the country. Thereafter, it was thought that the rest of the mergers or buyouts, after this first success, would come easier. But this was not so. The association of telephone companies, of which PLDT was a member, stood fast in their position not to be bought out at any cost.

A second approach was then attempted the full interconnection between these small telephone companies, and the PLDT,

which owned 72 percent of the national telephone backbone, to allow for an integrated telephone network. This has been only partially successful, since more telephone companies refused to make the necessary investments. In the last four years, the number of telephone exchanges, interconnected to PLDT, has risen from 80 to only 83. This has, however, allowed

almost 96 percent of the telephones in the country to make, not only interprovincial long distance calls, but also in many cases, international calls. While most of these interconnections are still operator assisted, 21 cities and municipalities now have direct dial access to long distance facilities.

The Central Philippine program

A review of the regional performance in the country indicated that the fastest growing economic activities to be found in the Central Philippine region, a group of islands called the Visayas. The region, except for 17 major cities and municipalities, was poorly

lacking in telecommunications facilities. The strategy, then was to evolve a basic telecommunications backbone network in the region, interconnected to Metro Manila, with a bank of exchanges to be installed in new areas or overlaid on areas with existing services. After almost a year of work, the studies and plans were completed, and the sources for foreign losses identified.

However, an operator for this relatively large network could not be agreed upon. The PLDT had strong reservations against the program. The government telephone organization was too weak. And it was certainly not possible to amalgamate the existing operators, whose self-interest would not allow them to give up their little kingdoms for a larger one, where there would be only one crown. And this, the second attempt of government to implement its policy of public-private sector cooperation, went down the way of many other grandiose plans.

[Text] *A development plan*

In the meantime, the Ministry of Transportation & Communications was discussing with representatives of the United Nations Development Programme (UNDP) and the World Bank. By late 1981, convinced that the government was serious in its telecommunications development, the International Telecommunications Union (ITU) agreed to fund the study for a National Telecommunications Development Plan for the Philippines. In December, 1982, the elected Consultant, A.D. Little International, Inc., submitted its final report to the ITU.

The guidelines of the study were that private ownership of the network would be retained, with strengthened government policy making and control. The efficiency-stimulating profit motive of private entrepreneurship, which largely eliminated the inefficiencies of destructive competition, had to be retained. On top of all this, there was need for an organizational structure that would encourage the expansion of network facilities and the provision of local services, to areas of the country that had been meagerly developed by existing telecommunications entities, because of poor profit potential and an inability to attract capital investment for such projects.

The study confirmed that the problems, facing the Philippines, in the development of its telecommunications network, were similar to those in most rapidly developing countries; limited financial resources, inhomogenous and non-integrated network facilities, and limited management and organizational control resources. A large number of separate entities owned and operated telecommunications facilities, with duplicating systems and without full interconnection. This situation was not common to most other developing countries, which typically had a state ownership monopoly. While there were undeniable advantages to the latter

form of sectoral structure, the problems faced by the Philippines were not likely to be solved by attempting to impose a European PT&T style management and control structure.

The study also noted the substantial unsatisfied demand for service. Furthermore, long distance calling into Manila was still provided primarily, through semi-automatic toll exchanges, involving inconvenience and long waiting times for connections to be made. The Philippine ratio of main lines to total telephone was low, relative to that in other countries in its region. More telephones, thus, competed for the use of network implying greater network congestion and a poorer grade of service. Each of these conditions was associated with the generally observed inadequacy of telephone facilities to meet demand.

The study recommendations, on sector organizations, included among others, a national monopoly for domestic telephone services. The existence of the PLDT experienced organization, in the early stages of development, favored the national monopoly approach. However, there were reservations as to whether the government would be able to effectively monitor and control a single national monopoly. To the extent that a strong and effective national regulatory and planning apparatus could be implemented by the government, the disadvantage, associated with the national monopoly approach, could be mitigated. The study also recommended that, if a national monopoly were to be adopted, it should be structured with autonomous regional subsidiaries which would be minority owned by the other telephone companies.

For domestic record services, the most appropriate organization would be either a single national monopoly for record services, or a private sector monopoly for telex and a separate government owned telegraph monopoly. The recommendation considered the rate at which telegraph

services were declining. In either case, the resulting domestic record carriers (s) would be required to use the integrated national long haul network, rather than a separate dedicated backbone system.

For data and other services, non-regulated competitive entry was recommended, with entry of the domestic voice carrier(s), to be allowed in this market segment. Data service providers would be required to use the integrated long haul network, but would be permitted to construct dedicated local exchange distribution networks. For satellite services, it was recommended that the local satellite system, DOMSAT, be integrated with the domestic voice carrier, PLDT.

For international services, the study recommended the consideration of a single full services international carrier, with voice services by the domestic telephone carrier. Factors for this choice included the advantages of full integration, the need to coordinate the development of the domestic and international segments and the regulatory effectiveness to ensure subsidies to domestic services from international service revenues.

A strong national regulatory body, under the policy control of the ministry, was finally recommended, in order to insure the effective allocation of resources and the proper control of procedures. The government would have to establish a methodology for a rate of return calculation and to monitor the level of rates, taking into account changing economic conditions.

The proposed plan intended that, by the year 2000, there would be a more reasonable balance between the demand and the supply of telephone service (2.1 million lines by 1990 and 41.4 million lines by 2000, with 80 percent of projected demand satisfied by a network trunk capacity designed to accommodate 100 percent of demand satisfaction). The integrated network plan was designed, as a logical sequel to the existing expansion plans, in phase with the PLDT ex-

pansion (X-4) program and the final plans for the Luzon program.

The program, required for this expansion, included the development of long-haul and regional networks; maintenance and operations; training and technical assistance; and administrative and marketing support. As such, it intended to interconnect all existing telephone systems and to improve the quality and operating standards for better subscriber service. This would then evolve existing long-haul systems into a national backbone network and eliminate du-

plication, with the long term view of executing all expansions towards an ultimate system digitization and direct distance dialing.

1986 and beyond

During the last few years, some very important events occurred that showered some optimism on otherwise dismal picture. The National Development Plan was approved and the Luzon expansion program was started, with financial assistance from the Japanese Overseas Economic Cooperation Fund. The government, in late 1982, also promised financial

assistance to the PLDT, in order that the much delayed X-4 expansion program could be accelerated. The domestic record carriers agreed, in principle, to merge into one corporation. The leading carrier, in fact, introduced digital technology within its own telex network. As an extension to the National Development Plan, the World Bank funded a study, in 1983, that would detail the first phase of the program, preparatory to a loan and a tender for the construction of the network.

[8 Oct 85 pp 7, 10]

[Text]

But certain events overtook what seemed to be a growing maturation in the telecommunications field. The assassination of former Senator Benigno Aquino catalyzed an economic aberration that saw the country reel from the resulting financial impact. Immediately, government rallied its forces together to avoid the disaster that the situation forebode. Programs were curtailed, expenditures reduced and cut-backs ordered. Among those that suffered, from this bold and firm mandate, was the telephone program. The Luzon expansion program was halved, the intended PLDT assistance was withdrawn, the World Bank study abruptly stopped.

With the International Monetary Fund (IMF) closely watching, a national plan for financial recovery was slowly evolved. It has taken almost two long years to package and complete the plan, according to the IMF requirements, a period during which the nation suffered inflation rates in the high fifties, interest rates in the mid forties, and the almost complete collapse on an export sector that had previously blazed its way into the international market.

These hardships are now behind us. The economic recovery program is in place and is forcing a slow, albeit sure, road back. It will take a few more years before the healthy confidence of the

early eighties will be regained. But the determination of the government and its people will surely ensure this success. The economic recovery program of the government includes, among others, an accelerated development of the telecommunications sector. With the successful national energy program almost completed, focus will now be concentrated on this long neglected sector.

Today, a review of the 1983 World Bank study is being finalized. The first phase of the study, which proposed an additional 380,000 lines, will be the first formal implementing step of the National Telecommunications Development Program. The approach of the study is to identify the cities and municipalities closest to the backbone system, with telephone demands from 500 lines up. A more critical prioritization will look at those with demands of from 1,000 lines or more. Moreover, the plan divides the programs into segments of \$50 million that may be undertaken separately, depending upon the funds availability. It is projected that within the national recovery program, the consultancies for system design should be awarded in 1987 and the corresponding construction contracts let out in 1988.

In parallel with this program, Phase II of the Luzon

expansion program is ready for tender. Phase II is a continuation of the OECF funded Phase I program, which will be partially operational in late 1985 and completed in 1986. These two projects will increase the national backbone network by at least 20 percent and will add another 21,400 lines to the existing network in Northern Luzon. These two projects will be the launching pad, from which the national program will take off.

In the meantime, the privatization of the telephone network system has already commenced. The existing step-by-step and crossbar systems, which have not been too efficiently operated by government, are slowly being sold to existing private telephone companies. This will integrate a member of redundant and smaller operations, make operations more efficient and force the private sector to actively participate in the national recovery program. Already, about five exchanges have been sold to the private sector. With existing in-country inventory, about four telephone companies have expanded their exchange networks. All these sales and expansions have carried covenants that these telephone exchanges, interconnect to the national backbone network and, where financially viable, install direct dial facilities.

Negotiations are also being finalized for the assistance from the Federal

Republic of Germany to upgrade and expand two (and in the long run, all) major exchanges in and around the Metro Manila area. The World Bank has also approved the implementation of further studies on the updating of the National Telephone Program, on frequency management and its computerization, on tariff review, and on a training and development program in telecommunications.

Conclusion

It is not easy for a developing country to go the way of the richer countries in achieving its telecommunications objectives. Already, as it slowly and painfully raises itself from the morass of yesterday's mistakes and inaction, the advances in telecommunications and information system technologies are already overtaking it. In many cases, the planning for tomorrow may not be

sufficient for the demands of the future.

But the reverses of today may be the turning points for tomorrow. Drastic incidents have forced upon the country the introduction of changes which are just as drastic. The lessons of history tell us that fiefdoms, in Europe and in Asia, were fused and welded into strong nations, over centuries of evolution and revolution. Economic strength grew from merging divided and tautological communities.

CSO: 5500/4308

JPRS•TTP•85•027
6 November 1985

SOUTH KOREA

BRIEFS

ERICSSON AXE EXCHANGES PURCHASED--Ericsson has received yet another major order for AXE exchanges. South Korea has signed an order for 17 exchanges worth 190 million kronor. The order includes equipment and components to be delivered from Sweden for local production of the telephone exchanges in Song Nam City. The order is the third of this type from South Korea for Ericsson. [Text] [Stockholm DAGENS NYHETER in Swedish 6 Sep 85 p 10] 9336

CSO: 5500/2860

CANADA

CRTC DECISION REJECTING CNCP LONG DISTANCE BID EXAMINED

Toronto THE GLOBE AND MAIL in English 6 Sep 85 p B16

[Article by Lawrence Surtees]

[Text]

The decision by the Canadian Radio-Television and Telecommunications Commission to reject long-distance telephone competition reads as if it were written by Bell Canada, the largest company regulated by the CRTC and the interest that gained the most from last week's action.

Instead of saying it "would not be in the public interest" to allow CNCP Telecommunications to compete with Canada's two largest phone companies, the CRTC could just as well have said it would not be in Bell's interest. (CNCP had applied to provide cheaper long-distance service in competition with Bell and British Columbia Telephone Co. Ltd.)

Given the CRTC's reasons and excuses for perpetuating the phone companies' 105-year-old long-distance monopoly, the public interest appears synonymous, in the commission's eyes, with the telephone companies' interest.

Not only did the CRTC side with the telephone companies, it swallowed their arguments that there is a historic "imbalance" between long-distance and local rates.

What the CRTC didn't tell the public — 70 per cent of whom want competition, according to a recent poll — is that the CRTC is responsible for the imbalance because it sets the rates.

So what is the CRTC going to do about this imbalance? This question is all the more important to eight million affected subscribers because they have been denied a competitive alternative.

In saying there is an imbalance, the commissioners are saying subscribers' monthly phone bills are subsidized by long-distance callers. In other words, the phone companies are forgoing millions of dollars because local rates are priced below cost, but the companies are being allowed to make up the loss from over-priced long-distance rates.

Yet the CRTC decision seems to have reversed a finding it made this June that there are problems in Bell's costing that purports to document the size of the imbalance.

Why did the CRTC change its mind so suddenly? One can only speculate about the reasons for this apparent contra-

4diction — if not hypocrisy — in regulatory policy.

And what is the CRTC going to do about the imbalance? The patriotic thing, of course: Study it, at yet another hearing.

Meantime, long-distance rate increases have been frozen, pending the outcome of the study.

One would think the freeze would upset the phone companies. But surprisingly, Bell's reaction was that it was not upset with this part of the CRTC decision. It had been exonerated.

Besides, local rates are not frozen. The CRTC can still raise them to make up the difference in Bell's bottom line caused by the long-distance freeze.

The consumer stands to be the loser with a decision that represents the worst of two worlds: rejection of competition, but the possibility of some form of rate restructuring.

Ironically, it was organized consumer groups and big unions claiming to represent the little people that were the most vocal in opposing CNCP's application. No wonder, then, they did not react violently when Bell and B.C. Tel boldly declared that the consumer won the most.

Those opposed to CNCP's application had myopically equated competition with deregulation, conjuring up images in their slick ads and brochures of massive rate hikes and technical disaster befalling the

phone system if the application were approved.

They conveniently ignored the fact that competition does not make restructured rates inevitable; restructuring requires a regulator's decision and a political will to support it. More important, the CRTC is by no means intent on deregulating itself out of business, unlike its counterpart in Washington.

In its reasons for rejecting CNCP's application (which accounted for only six pages of a 125-page decision), the CRTC said it did not think CNCP would be able to pay a subsidy to the phone companies to keep rates low and thus provide the benefits normally derived from competition.

In the words of one federal official involved with competition policy, the CRTC took it upon itself to prejudge whether there is a financially viable business in providing alternative long-distance service.

He said the hearing is important because the CRTC knows an application to enter a monopolistic market signals that the monopolist is making too much profit.

CNCP promised to pay any quantifiable subsidy to the phone companies to keep phone rates low if allowed to compete. If it failed to do that, it could have been ordered out of the long-distance market.

The CRTC appears to agree that the phone companies are making too much money. But one unwritten reason for not

letting those profits be shared by a competitor may be that no one can actually determine the price of a phone call.

Although the phone companies provided forecasts of how much they thought rates would have to rise if there were competition, the CRTC can not determine what an appropriate subsidy would have to be.

Since eight million phone subscribers are an influential voting bloc — particularly when concentrated in Quebec, Ontario and British Columbia — it is unlikely that the Tory Government will alter the CRTC decision, despite its pro-business, pro-competition stance.

Faced with a humiliating defeat and well-organized opposition, it will be many years until CNCP tries again.

Given the overriding policy requirement of universal access at affordable rates, the small size of the Canadian market and the technological prowess of the telephone companies, it is now less likely that the CRTC or its political masters will invite others to apply to take a shot at the telephone companies.

The message may be that long-distance competition can never be justified until someone can say with certainty what a single phone call costs. Finding out would require an accounting miracle.

Canadian phone subscribers and would-be competitors, however, will be on hold until the answer is found or laid upon the regulator's plate.

CANADA

MITEL SHAREHOLDERS APPROVE TAKEOVER BY BRITISH TELECOM

Toronto THE GLOBE AND MAIL in English 7 Sep 85 p B9

[Article by Lawrence Surtees]

[Text]

OTTAWA — Mitel Corp. has cleared the first hurdle in its plan to sell 51 per cent control to British Telecommunications PLC for \$320-million. Yesterday, a majority of shareholders approved the transaction at the annual and special shareholders' meeting.

The telecommunications equipment manufacturer, based in Kanata, Ont., announced an agreement May 9 to sell control through the issue of treasury shares at \$8 each and a further five-year option to British Tel so it could buy further shares to maintain its 51 per cent ownership. The agreement, modified Aug. 8, is still before the British Monopolies and Mergers Commission for approval.

Plagued by losses in seven of the past nine financial quarters, Mitel will use the new capital to reduce its long-term debt of \$260-million and give it additional working capital.

However, neither chairman Michael Cowpland nor presi-

dent Terence Matthews made much mention of the deal with British Tel in their presentations.

Rather, the theme that executives wanted to convey was that the company is turning around and continuing "in the direction of profitability, but with more stability," Mr. Matthews said.

Mitel had a loss of \$32.1-million or 98 cents a share for the year ended Feb. 22, compared with a loss of \$32.4-million or 51 cents a share in 1984. For the fiscal 1986 first quarter, which ended May 24, the company posted a loss of \$15.2-million or 43 cents a share on revenue of \$84.6-million, compared with a loss of \$17.78-million or 51 cents a share on revenue of \$71.7-million a year earlier.

Mr. Matthews said Mitel will post record revenue for the second quarter ended last month, but did not indicate whether the company would be in the black, although he said cash flow "is now stable and positive."

In the meantime, the company will continue to tighten its belt.

Earlier this week, Mitel announced a further rationalization of domestic telephone-equipment manufacturing in Renfrew, Ont., and consolidation of specialized chip making in Caldicot, Wales. That move will cut its Kanata-based work force by a further 440 employees — an unknown number of which will be laid off within the next six to nine months, Mr. Matthews said.

The restructuring is the largest in the history of the 12-year-old company and the latest in a string of layoffs during the past 18 months.

In an effort to earn a profit, Mitel will continue to reduce its overhead and use its plants more efficiently, Mr. Matthews said.

He also said the company has sold 90 of its large SX-2000 switches in the past six months, bringing the total number installed to 223 since the product's introduction in July, 1984. He added that Italian authorities granted approval earlier this week for the switch to be hooked up to the phone system there, clearing the way for sales to Italian customers.

CANADA

TRILLIUM SECOND-QUARTER RESULTS SHOW INCREASE

Ottawa THE CITIZEN in English 19 Sep 85 p E15

[Article by Doug Yonson]

[Text]

Two years after its formation, Trillium Telephone Systems Inc. of Kanata is flying high.

The Kanata manufacturer of sophisticated electronic telephones released impressive quarterly financial results Wednesday, reporting sales of \$13.0 million and net profits of \$1.70 million for the three months between May 24 and Aug. 23, the second quarter of its 1986 fiscal year.

Formed in August, 1983, the Mitel Corp. subsidiary company spent one difficult year developing and targetting its product: multipurpose phones for the residential and small business market. But it has now been profitable for four consecutive quarters, with each quarter reporting higher sales. Mitel owns 71 per cent of Trillium's stock.

Comparison of current results with the same period a year earlier is not informative because of the slow first year the company experienced. Sales in May to August of 1984, for example, were only \$1.5 million, with a loss of \$850,000.

But the current second-quarter results showed a steady increase over those of the first quarter, when sales of \$9.3 million produced a profit of \$510,000. President Graham Neathway said Wednesday that first quarter profits were reduced by a large advertising campaign that cost \$600,000; much of the benefit of the campaign will be realized in subsequent quarters.

Second-quarter earnings are inflated by an

unusual item, a \$600,000 (U.S.) lump sum payment by the Swedish Telecommunications Administration to terminate a three-year supply contract after only two years.

Although the contract originally called for \$12.5 million in Trillium sales over the three years, about \$5 million was actually shipped, Neathway said, because the Swedes overestimated the market for the Talkto 109 system (one line, nine pages or monitors) intended for home use. The 109 is not marketed in North America because Trillium discovered, in an expensive mistake during its first year, that demand is too small at the moment.

Neathway said the two sides are discussing a sales contract for the 109's successor, now under development.

For the first six months of this year, Trillium has earned \$2.2 million on sales of \$22.3 million, compared with a loss of \$2.3 million on sales of \$1.9 million for the same period last year.

The bulk of the sales have been of Trillium veteran offerings, the 616 (six outside lines, 16 extensions) and the 308 (three lines, eight extensions). But during the second quarter the company introduced two new products, the 208 (two lines, eight extensions) and the 1000, a multifunctional individual telephone. The first three months' production of the 208 set have been sold out, Neathway said.

Another product, the 1032 (ten lines, 32 extensions) will be introduced next month and has already generated \$2 million in back orders, Neathway said.

CANADA

BELL CABLE PROJECT, CUSTOM PHONE SERVICE DISCUSSED

Underwater Cable Project

Toronto THE TORONTO STAR in English 29 Aug 85 pp E1, E19

[Article by Fred Lebolt]

[Text]

BONE ISLAND — In a remote section of this Georgian Bay Isle, two unassuming-looking shacks stand side by side.

One is a familiar enough structure for cottage country: the outhouse.

The other is more mysterious.

Resembling a tool shed, the structure has large cables feeding into it. The door is protected by a sophisticated locking device.

Only those knowing a secret combination can get in — and once inside, a visitor is greeted by panels of wires, lights and other high-tech marvels that hum away in the middle of the woods.

Have aliens set up shop?

Nope. It's the phone company.

The shed represents only part of a four-year, \$9.4 million project by Bell Canada to install the latest telecommunications technology under the sometimes-treacherous waters of Georgian Bay.

Using cable dropped by barge to depths as much as 22.5 metres (75 feet), Bell is wiring up some Georgian Bay islands using sophisticated fibre optics — thin strands of glass that carry telephone signals in the form of laser light.

Why?

"We have an obligation to serve this territory," says Bert Powell, Bell's local district manager for the region.

Under its mandate, Bell Canada is charged with providing telephone services to Ontario and Quebec, regardless of how remote the setting.

Bev King, the Bell manager responsible for overseeing outside plant facilities, says cottagers, local businesses and residents have all been pushing for phone service.

But King says that traditional telephone technology — copper wire — made the installation of phone service uneconomical and technically difficult, if not impossible, in the region.

Fibre optics changed that.

The technology is the stuff of science fiction: hair-thin glass lines that can carry hundreds of telephone conversations — along with computer data and video (television) signals — by laser light.

Only recently has the technology become commercially viable.

Two years ago, Bell announced it was going to use fibre optics in all its new cabling between telephone switching stations.

CNCP Telecommunications announced last year it is putting in a fibre optics network that will stretch across Canada.

And Telecom Canada (made up of major Canadian phone companies including Bell) made a similar announcement earlier this year.

But the Georgian Bay project marks Bell's first foray into underwater fibre optics for local telephone service in a previously unserved territory.

A few glass strands packed into a protective cable can serve thousands of customers; by contrast, a pair of copper wires can only handle one telephone call at a time.

"We took a look from a cost point of view, just straight dollars and cents," says King. "Conventional (copper) cable out here would just bankrupt us." The 10-kilometre (6.2-mile) underwater cable that carries telephone connections between the Bone Is-

land switching hut and the mainland would require a massive amount of copper stuffed into an enormous cable.

Not only would the cost be prohibitive, but the weight of the copper cable would be impossible to carry on telephone poles after the cable rises out of the water, King says.

As for the economics, King estimates that the \$3.9 million required to put in a fibre optics service for Bone and Portage Islands would escalate to \$15 million using copper.

The total Georgian Bay project encompasses a 150-square-kilometre area, involving 503 subscribers, and is being hooked up in three phases. The last area scheduled for completion should be ready next year.

The second phase, now being finished, involves a combination of copper and fibre-optics wiring; individual cottages are being wired with copper, which feeds into the Bone Island switching hut.

From there, all the signals are taken under Georgian Bay by the fibre optics cable to a main telephone exchange at Honey Harbor, located about 173 kilometres (107 miles) from Metro.

Both the copper and fibre optics cable are being placed on the floor of Georgian Bay by huge spools that spin the cable off 40-ton barges.

With the cabling in place, Bell technicians go to individual cottages to install the phones — by boat, of course. A custom-built \$40,000 installation boat lets the installers weave up and down Georgian Bay's tricky waters.

Cottagers are excited about the prospect of full telephone service.

"It's nice being tied into the rest of the world," says Ron Rapp, 25, whose parents have been cottagers in Georgian Bay since 1958.

The minimum cost of the service is about \$5 a month, based on the rate group system in place for determining monthly charges for telephone use in different parts of the province.

Residential Custom Service

Toronto THE GLOBE AND MAIL in English 13 Sep 85 p B14

[Article by Lawrence Surtees]

[Text]

Bell Canada will begin renting a new electronic telephone on Oct. 1 that will allow subscribers to get special custom features at home such as call forwarding and, in the future, could put obscene callers on perpetual hold and start a call trace with the push of a single button.

Dubbed Signature, the new telephone will come equipped with special buttons that will allow the user to: preprogram numbers for speed dialing; put a caller on hold with a call waiting; forward calls to another number; and talk to three people at once with three-way calling.

However, subscribers will have to sign up for each of these extra services and pay Bell a monthly fee for each. Although Bell customers are allowed to own their own telephones, the Signature phone can only be leased from Bell.

Bell already rents a smaller electronic phone called Harmony. Both phones are made by Bell's sister manufacturing company, Northern Telecom Ltd. of Mississauga, Ont., at a specially automated plant in London, Ont.

The four special services have not been offered before to the utility's five million residential subscribers in Ontario, Quebec and the Northwest Territories. Features such as call forwarding have, however, been available to business customers who use sophisticated telephone sets.

Bell subscribers will be able to use phones made by other companies to get the new services. But regardless of what kind of phone they use, special touch-tone lines must be leased from Bell, which adds an additional monthly charge and limits the areas in which the new features may be available.

In addition to the regular monthly phone bill for a single line, subscribers would pay the following charges for the new phone and services:

- ☐ Monthly lease of the Signature phone will cost residential subscribers \$4.05 and business customers will pay \$5.55;

- ☐ The touch-tone line charge costs \$2.50 per line for a residence and \$3.80 for businesses;

- ☐ Call waiting, which tells subscribers when a second call is coming and allows the first caller to be put on hold, costs \$4 a month for residences and \$5.55 for businesses;

- ☐ Call forwarding, allowing calls to be transferred to any other telephone number (such as a neighbor), costs \$3.40 a month for residences and \$4.95 for businesses;

- ☐ Speed calling, allowing a single button to be programmed to dial a frequently called number, also costs \$3.40 a month for residen-

tial subscribers and \$4.95 for business customers;

- ☐ Three-way calling, which creates a conference call between any three telephones, costs \$5.70 a month for residences and \$7.50 for businesses.

A discount is also provided for any two, or all three, of the services, excluding three-way calling. Residential subscribers wanting any other two will pay \$5.50 a month or \$7.30 for all three and business customers will pay \$8 for any two and \$11 for all three.

All rates have been approved by Bell's federal regulator, the Canadian Radio-Television and Telecommunications Commission.

The new phone will also allow Bell to provide additional services to residential subscribers in the future, said Andrew McMahon, executive vice-president of marketing and technology at Northern Telecom Canada Ltd.

CSO: 5520/53

CANADA

GOVERNMENT SEEKS HELP IN FINANCING SATELLITE PROJECT

Ottawa THE CITIZEN in English 10 Sep 85 p B8

[Text]

The federal government is looking for outside help in financing an ambitious satellite project that could revolutionize information gathering.

The cabinet is scheduled to consider this fall whether to commit up to \$350 million to the \$550 million Radarsat project, but proposals have already called for business contributions to its development and construction costs.

Radarsat, if it receives cabinet approval, will be developed jointly by Canada, the United States and Britain. Its technology, much of it to be developed in Canada, is considered among the most advanced in the field of remote sensing.

A prospectus released by the Department of Supply and Services notes that companies, in ex-

change for up-front cash contributions to the project, will earn exclusive rights to sell information from the satellite outside Canada, the U.S. or the U.K. for the satellite's projected life span of five years.

The real guts of Radarsat is its set of synthetic aperture radars.

From its perch high above the clouds, the radar will produce computerized images of earth structures, giving geologists an invaluable tool in detecting promising areas for mineral exploration. Companies will be able to buy data from the satellite and process it for likely exploration prospects before dispatching ground teams to make physical assessments.

In agriculture, Radarsat will be able to predict in advance the approximate size of crops, especially for canola, an important Canadian oilseed.

CSO: 5520/53

INTER-AMERICAN AFFAIRS

THREE ANDEAN NATIONS TO SHARE SINGLE INTELSAT TRANSPONDER

Bogota EL TIEMPO in Spanish 3 Aug 85 p 8-A

[Text] For the first time in the history of telecommunications, three Andean countries will join together to share the services of Intelsat so that through the use of a single transponder each of these countries will receive and transmit television signals.

At the same time, the area countries accepted the offer of a nonreimbursable credit from the European Economic Community (EEC) for consultation in reviewing the feasibility study of the Condor project as a significant step in the initial phase that will lead to sharing that satellite resource as of 1990.

Those were the most important conclusions of the second meeting of the Andean Satellite Telecommunications Commission in Caracas, Venezuela, at which Colombia was represented by the vice-minister of communications, Maria Cristina de Mejia, and Telecom expert, engineer Gerardo Mesias.

The purpose of the experiment of sharing Intelsat's service, which will be conducted by Colombia, Peru and Venezuela during the month of August, is to study its technical feasibility so that, if it is positive, appropriate negotiations will be effected for a joint lease.

By this joint action, the three countries will obtain a significant reduction in the costs of leasing Intelsat's services. In addition to the economic benefits, the Andean countries will gain great benefits of a social, cultural and commercial nature. Later on, Ecuador and Bolivia--countries that are currently working to secure the necessary ground infrastructure required for satellite services--will join this project.

At the same time, the members of the Andean Telecommunications Commission, meeting in Caracas, recommended continuation of the policy of leasing Intelsat transponders for their national services as a stage prior to the launching of the Condor satellite.

A transponder is one of the 24 communications channels which most of the world's satellites have. At the present time, Colombia uses one Intelsat transponder: half is used for communications and the other half to transmit television signals to the national territory.

Contract Awarded

At the same time, it was revealed that, following a study by the National Contracts Committee and the authorization of the company's board of directors, the president of the National Telecommunications Company, Telecom, Juan Sebastian Betancurt, has awarded the contract of international public bid No 004-85 to the Fernando Garcia Silva Telectronic consortium, which will supply Telecom with the rectifier and batteries for the National Telecommunications Company building in Delicias, Barranquilla, as well as the batteries needed by the repeater stations of Guasimilla, Buenavista, Cerro Granada, Cerro Perico, Velu, Cerro Neiva, Alguacil and the Telecom Building in El Guamo.

The total cost of the contract is approximately 50 million pesos.

8711

CSO: 5500/2098

BERMUDA

ISLAND-WIDE DATA NETWORK TO OPEN BY DECEMBER 1985

Hamilton THE ROYAL GAZETTE in English 10 Sep 85 p 19

[Text]

Bermuda will have a fully-working island-wide datacommunications network by the start of December.

Three telephone exchanges are already hooked into the network, while another three will be linked in the next 10 weeks or so.

The Island will probably be the only country in the world with a data network providing total coverage.

The introduction of the network, called Datanet, is an important part of the Bermuda Telephone Co.'s modernisation of its service.

The network is a high-speed datacommunications system which uses ordinary telephone lines and can handle up to 56,000 bits of information a second.

Datanet uses integrated services digital network (ISDN) technology developed by Northern Telecom, Telco's long-standing Canadian-owned partner.

Information of different types — voice, data, text and graphic images — can be transmitted around the same network with access from common terminal points.

There are currently 20 units being used

by six local companies, including Telco.

The service is available because of Telco's conversion in recent years to more advanced digital exchanges, which went into operation in 1983, and the introduction of fibre optic cabling.

Exchanges at Somerset, Hamilton and St. George's already have access to Datanet. Those at Bailey's Bay, Paget and Southampton will come on to the system in November.

A seventh exchange, in Hamilton, is being phased out by 1992. About 1,000 lines will be transferred to the newer Hamilton exchange this year.

Telco spokesman Mr. Eugene Saunders said yesterday interest in Datanet was high.

"It's there. It's working, although we won't launch it formally until the rest of the Island is equipped with digital exchanges," he said.

"We've had a lot of enquiries, particularly from large users who are looking for cost savings."

He said the system was cheaper than alternative services offered, including leased lines and Dataport.

CSO: 5540/006

BERMUDA

GOV'T PLANS CLOSER REGULATION OF TELECOMMUNICATIONS

Hamilton THE ROYAL GAZETTE in English 20 Aug 85 p 2

[Text]

Telecommunications in Bermuda will be more closely regulated by Government in the future in a bid to reduce the cost of high-tech communications between Bermuda and the rest of the world.

Minister of Community and Cultural Affairs, the Hon. Gerald Simons, told Kiwanis last night the Telecommunications Ministry is drafting a new bill which will enable Government to regulate the industry.

He revealed that he will today receive the first \$1.3 million instalment of payments to the Government by Cable and Wireless.

"There has been virtually no control of the public telecommunications service in Bermuda, allowing the growth of this industry to

proceed unchecked," he said. "In years past this situation was tolerable, but it is unacceptable today."

Senator Simons later refused to elaborate on the provisions of the bill, but he said: "Telecommunications costs between Bermuda and the rest of the world must be reviewed in an effort to bring about a substantial reduction."

He said recent representations made to him suggested the cost of direct dial telephone calls and data facilities for computers are too high.

Government, he said, had to ensure the right telecommunications services for exempted companies and the hotel industry were provided or they would be unable to operate here.

CSO: 5540/006

BERMUDA

BRIEFS

RETURN OF TV NEWS--Local evening TV news returns to the airwaves tonight when ZBM presents its first television newscast since the closure of the Island's two television stations in the Bermuda Broadcasting Company strike in June last year. Channel 10 will present the ZBM Evening News, including news, sports, weather and financial news, at 7 p.m. weeknights, and the programme will last a half hour. News manager Mr. Rick Richardson will be reading the news, and at the end of each newscast will give a rundown of major stories appearing on the CBS Evening News, immediately following the local news at 7:30. BBC acting general manager Mr. Malcolm Fletcher said last month that no new staff would be added to broadcast the programme, but it would be handled as part of the current television operation. If more staff were required later, he added, then more people might be hired. Mr. Richardson took the proposal for returning a news programme to the Hon. Sir David Gibbons, of the Gibbons Group, which is interested in the BBC, several weeks ago and it was quickly accepted. ZBM's News at Midnight will continue to run, and will be the sole local television newscast on weekends. [Text] [Hamilton THE ROYAL GAZETTE in English in English 16 Sep 85 p 1]

CSO: 5540/006

JAMAICA

SEAGA ANNOUNCES NEW BROADCASTING CORPORATION BOARD

Kingston THE DAILY GLEANER in English 6 Sep 85 p 1

[Text]

Prime Minister Edward Seaga yesterday confirmed the appointment of Mr. George Abrahams, Marketing Director of J. Wray and Nephew Group of Companies, to head a seven-man board at the Jamaica Broadcasting Corporation.

The announcement of Mr. Abrahams' appointment confirms a **Gleaner** report on Wednesday that he would head the Board. The Board will serve for two years effective from September 5.

Other members of the board are:

●Mr. Clifford Rae, Managing Director, of Retread Specialist Limited, and deputy chairman of the Advisory Committee of the Department of Supplies in the Ministry of Finance. He has many years of experience in the recording industry through his connections with West Indies Records;

●Mr. Gordon Wells, Permanent Secretary in the Ministry of the Public Service;

●Mrs. Sally Porteous, Manager Film Unit, Jamaica National Investment Promotions Limited and

former chief stewardess at Air Jamaica;

●Mr. Troy Caine, writer and graphic artist. Mr. Caine has written a book on the Prime Minister and has close connections with social activities in Tivoli Gardens;

●Mr. Ulric Simmonds, Government Communications Consultant and former Political Reporter of the **Gleaner** Company and;

●Mrs. Gloria Lannaman, General Manager of the Jamaica Broadcasting Corporation.

In making the announcement, Mr. Seaga was quoted by a Jamaica House statement as saying:

"With the settling of the new structure of the Corporation, it is now possible to appoint a Board which reflects the directions which I outlined in my statement to Parliament on September 3."

The JBC had been operating without a Board since May 1983, sparking much debate and speculation as to the station's ability to function effectively without a Board. The naming of the Board comes after recent happenings at the station in which more than 100 employees were laid off.

6 November 1985

JAMAICA

PNP OBJECTS ANEW, REFUSES TO ABIDE BY SEAGA'S JBC POLICY

Kingston THE DAILY GLEANER in English 7 Sep 85 p 2

[Text]

The PNP said Thursday in a reaction to Prime Minister Seaga's policy statement on the media that it would not regard as necessarily binding, any contract or agreement entered into by the JLP Government or the Jamaica Broadcasting Corporation with any private commercial entity for the divestment of the JBC-AM, JBC-TV, or the JBC's three regional stations.

In a statement issued by the General Secretary, Dr. Paul Robertson, the Party said it was fundamentally opposed to the divestment of the JBC's facilities and services as was outlined by Mr. Seaga in his presentation in Gordon House on Tuesday.

According to Mr. Seaga, said the PNP, an analysis of JBC's profit and loss account for 1984 and projection for the current year suggested that television operations could be made profitable. Dr. Robertson charged that it was not only the incompetence of management which accounted for the dramatic fall in radio listenership from over 40% in 1980/81 to just over 20% this year, and which made JBC-AM unattractive to advertisers, but in particular the public loss of credibility because of the blatant JLP political propaganda projected in its news reports and infrequent public affairs programmes.

Dr. Robertson said that better management and programming in radio could have improved listenership and commercial earnings, and while this was ebbing, the profits earned from television could be used to make the Corporation financially viable thus negating the need to terminate the employment of so many professional, loyal and experienced members of the staff.

Dr. Robertson also said that the complaint by Mr. Seaga of "excessive staffing", was caused from the JBC's own recruitment between 1981 and 1984, and in this connection charged the JBC with breaking tradi-

tional labour relations practices in making certain categories of workers with more than ten years service redundant while retaining similar categories with between only one to four years of service.

The PNP's General Secretary said the law clearly stated that the JBC was established as a public Corporation to provide broadcasting services of high quality, both in relation to transmission facilities as well as programmes. The law, he said, did not provide for the divestment of the facilities and services in whole or in part to private commercial interests.

Dr. Robertson said that while in 1982 the Government had granted the JBC a three-year period free of competition to achieve viability before considering the granting of licences for the operation of private television broadcasting, the failure to approve a Board of Directors for two of those years was seen by the PNP as a ploy to prevent the station from achieving this objective in order to justify the present decision.

The Party was also concerned about the absence of any announced criteria by which the JBC services would be divested. Without this, the General Secretary said, there was an open door for corruption. For example, he said, reliable reports received by the Party were that an advertising agent who was a prominent JLP activist had been given politi-

cal assurance that his company would obtain the JBC-TV's "Morning Time" programme. This, he said, was a farce and made a mockery of Mr. Seaga's assurance that "the private sector entity will be chosen from proposals submitted to the Government."

Pending the assumption of office by the People's National Party, Dr. Robertson said the PNP was demanding public tenders for the services. He stressed, however, that even with tenders the PNP will not be necessarily bound to these contracts.

He said that the electronic media policy outlined by Mr. Seaga yesterday as it related to the divestment of the JBC, was illegal. There was no provision in the law which gave the Government or the Prime Minister any authority to arrogate the functions of the Board or to divest its broadcasting licence.

It was the view of the Party that no Minister had the legal authority to dispose of any of the property or rights of the JBC whether by divestment or by lease.

The Party therefore demanded that the proposals be withdrawn, pointing out that a change of such fundamental importance to media in Jamaica could only be done by Government which had the respect of and a clear mandate from the people - which Mr. Seaga did not have.

CSO: 3298/027

IRAN

BRIEFS

SWISS RADIO TRANSMITTERS--An agreement for the purchase of 10 powerful short-wave radio transmitters, each with 500-kw of power, has been signed between the executive director of the Iranian radio-television organization and (?Branbavari), a Swiss company. Under this agreement worth 1.4 billion rials, the building of these transmitters will be done by the (?Branbavari) company and their installation and maintenance and building of antenna for these transmitters will be handled by the experts and workers of the Iranian radio-television organization. The total cost of installation and commissioning of these 10 transmitters, to be installed in three regions in the country, will cost 5 billion [figure as heard] rials. Under the agreement the period for execution of the agreement is 5 years. The first transmitter is expected to be commissioned within the first 10 to 12 months. When commissioning of the project is completed several out-of-reach points and all regional countries will be covered by shortwave transmissions. [Text] [Tehran Domestic Service in Persian 0430 GMT 6 Oct 85 GF]

CSO: 5500/4703

PAKISTAN

DIRECT DIALLING ESTABLISHED BETWEEN PAKISTAN, TAIWAN

Karachi DAWN in English 26 Sep 85 p 6

[Article by Shaheen Sehba]

[Text]

KARACHI, Sept 25: Pakistan has been linked with Taiwan through the International Subscribers Dialling system, informed sources said.

They said the dialling link between the two countries was operating for quite some time now and the business community was making full use of it.

The Karachi Chamber of Commerce and Industry, sources said, was the first to make a representation to the Government for providing facilities of telephone and cable with Taiwan in view of the expanding trade in that country.

Following the request, the Government quietly agreed to allow the ISD service from Pakistan to Taipei, sources said.

Trade between the two countries is not officially recognised but most of the Taiwanese goods arrive in Pakistan through Hong Kong.

Government had, however, allowed direct shipment from

Taiwan to Pakistan some time back.

Many government-run organisations including the PIA have also been buying from Taiwan sources said.

Although Pakistanis cannot officially travel to Taiwan, a system accepted by the traders and authorities on both sides has been in practice for some time which makes travel possible and easy.

Traders first touch Hong Kong and from there contact their business partners who either receive them at the airport or inform the Taiwan Embassy in Hong Kong to issue travel permission.

Passports are not stamped either on arrival or departure from the country, under the arrangement.

Some delegations from Taiwan have also been visiting Pakistan, but whether the same procedure was adopted by the Pakistani authorities is not clear.

CSO: 5500/4702

PAKISTAN

MINISTER TALKS ABOUT NEW PHONE LINES, DIGITAL EXCHANGE

Karachi DAWN in English 29 Sep 85 p 1

[Text]

ISLAMABAD, Sept 28: The Federal Minister for Communications, Mr. Mohyuddin Baluch, informed the House on Saturday that 70,000 telephone lines would be laid down all over the country during the Sixth Five-year Plan period.

Responding to a number of supplementaries on a question posed by Haji Mohammad Unis Elahi during the Question Hour, the Minister said 2,000 new Public Call Offices would be set up in the Sixth Plan period throughout the country.

He revealed that a summary had been sent to Prime Minister Mohammad Khan Junejo to empower the MNAs for recommending PCOs in their areas. Prior to it, the provincial Governments were responsible to recommend the setting up of Public Call Offices in various areas, he added.

In his written answer, the Minister said there were 977 telephone exchanges throughout the country. On a supplementary by Mohammad Nawaz Khokhar, the Minister said the Islamabad region was included in the expansion scheme of telephone facilities to people.

On a question by Mohammad Nawaz Khokhar, the Minister said the failure of telephone lines in certain areas of Islamabad during the recent rain was mostly due to erosion of subsoil layer under the cable routes caused by heavy rains.

Various steps, he explained, were planned to avert such a situation in future which included:

- Construction of retaining walls to protect the cable duct routes at places which have been found to be frequently eroding due to heavy rains.

- Relocation of part of inter-exchange junctions on radio circuits on important routes instead of present underground cables.

On a supplementary, the Minister said the present system could be replaced with inter-exchange junctions on radio circuits within six months.

On another question, he said it was planned to provide nationwide dialling facility to Lalamusa by the end of 1987-88 and it was also planned to extend this exchange from 500 to 1200 lines during the Plan period.

CSQ: 5500/4702

6 November 1985

PAKISTAN

BRIEFS

PAKISTAN-UAE CABLE LINK--Karachi, 5 Oct--The 1100 kms submarine cable will be laid between Karachi and al-Fujayrah (UAE) starting from the beginning of the new year. Experts from a Japanese firm are already here to lay the cable at a depth of about three-and-a-half kilometres, which will be the deepest marine point between the two countries. The submarine cable network will connect Karachi with al-Fujayrah and from there to Abu Dhabi and the rest of the world. This will be a new avenue for telecommunications contact with the world. Cable laying work will be completed in 22 months. The entire project will cost \$45 million to be shared between Pakistan and the UAE on equal basis. [Excerpt] [Karachi DAWN in English 6 Oct 85 p 8 GF]

CSO: 5500/4704

EUROPEAN AFFAIRS

GROUND STATION TO IMPROVE NORDIC COUNTRIES' PHONE CONNECTIONS

Helsinki HELSINGIN SANOMAT in Finnish 20 Sep 85 p 11

[Article: "Satellite Station To Improve Phone Connections With Europe"]

[Text] Stockholm--Finland's telephone connections with the rest of the world will be improved at the beginning of next year when Sweden begins to transmit telephone calls from Finland and the other Nordic countries to Europe through its new tele-satellite station.

The satellite station was dedicated on Tuesday in Agesta in the southern part of Stockholm. It will begin operating at the beginning of next year.

At the present time Sweden's telephone system transmits approximately 650 calls at once along cables connected to Europe. The new station will add an additional 1,920 lines. The Agesta station will transmit calls from Sweden, Norway, and Denmark.

The same station will handle the transmission of Eurovision programs to television in the Nordic countries. Last summer's Live Aid concert was seen in the Nordic countries by means of the station.

The station's gigantic antenna is directed at a satellite which is in orbit over Nigeria.

10576
CSO: 5500/2864

EUROPEAN AFFAIRS

BRIEFS

DEFINITIVE EUTELSAT AGREEMENT--Since 1 September, the European Satellite Telecommunications Organization EUTELSAT is governed by the convention and the final operating agreement that were signed by 25 member countries. Since 1977, Eutelsat had been governed by an interim convention signed by 17 members of the European Conference of Post and Telecommunications Administrations. EUTELSAT thus entered in its new stage with two satellites already in service and a third one, "ECS-3," that will be placed in service two months after its launching during the night of 12 to 13 September. The first council meeting of the signatories of the new organization will start in Paris on 17 September. It will examine the progress of the procurement of five second-generation "EUTELSAT" satellites, the first of which should be ready for launching in 1989, and it will update the studies on the new direct-broadcasting satellite (DBS) project. [Text] [Paris AFP SCIENCES in French 5 Sep 85 p 34] 9294

CSO: 5500/2511

FINLAND

SALORA-LUXOR EXPANDING INTO COMPUTERIZED TELECOMMUNICATIONS

Helsinki HUFVUDSTADSBLADET in Swedish 25 Aug 85 p 11

[Article by Inger Jagerhorn]

[Text] "The tempo must increase."

This was stated by Roger Jehander, head of Luxor in Motala.

He was talking about the much-discussed possibility of increasing efficiency within the Salora-Luxor group.

This year, 1.5 years after the merger, Salora-Luxor should function basically as a single company.

Nevertheless, TV sets, for example, are still produced in Salo, Finland and in Motala, Sweden. The two sides still seem to give only lip service to the merger.

Indications of competitive thinking may still be seen: "We are number one."

In Finland Antti Lagerroos, head of the entire Salora-Luxor group, said this could be called "redundancy" only if the situation continued. At present, the concepts are different.

"In the future, of course, we will try to avoid double investment programs and double service systems."

Large Bite To Swallow

Salora and Luxor were a large bite for the Nokia Concern to swallow. It is digesting its prey slowly, like a boa constrictor. No one wants to be specific as to how long the restructuring will take. No one will say what production will be moved where.

The Swedish MBL (Codetermination Act) negotiations are serving as an excuse: The personnel must not read news about their jobs in the newspaper.

Roger Jehander illustrated how different Finnish and Swedish corporate cultures

are--always a factor to be reckoned with in mergers. He does not see MBL as a serious problem.

"We have learned to use MBL. Labor and management are not necessarily on opposite sides of the table. We assume that people can act reasonably."

This was supported by a concrete example. About 600 of the more than 2,000 employees had to be layed off during the efficiency drive at Luxor in 1979 to 1982. The union accepted this, although it was a bitter pill to swallow.

Luxora? Never!

TV sets rolling off the assembly line at the Motala plant have two different labels: Salora-Luxor and Thorn (rental TV). How much of such a TV is domestic?

This may be calculated in various ways, but Lagerroos said that the domestic content was about 60 percent in both cases.

Salora is fighting to increase this percentage. One reason for this is that demand for exports to the Soviet Union covers 80 percent of production, while the rest is used for foreign exchange dealings. The key item is the picture tube. Salora has attempted to obtain Soviet picture tubes, but has failed so far.

"Now the Russians have bought an RCA license and a picture-tube factory is under construction there at present. We are following the situation carefully," Lagerroos said.

With regard to Luxor sets, the term "domestic" has a different meaning. Luxor is sold in Sweden as a Swedish TV.

"We do not intend to lose that competitive advantage," Jehander said, "even though little is actually produced in Sweden. If 'Luxora' suddenly appears on the sets, we will lose this advantage."

The Salora-Luxor group is now the largest manufacturer of color TV sets in the Nordic countries. The purchase of these two companies helped make the Nokia Concern a genuine electronics company--second largest in the Nordic countries after Ericsson.

Family Likeness

Salora and Luxor have a family likeness that goes far beyond today's products. Both were founded during the twenties--Luxor in 1923 and Salora in 1928--by enterprising private individuals.

Initially, radios were produced. The TV came during the fifties. Their product lines developed in a similar manner.

Both companies have had difficult crisis years. Both were purchased in 1983 by Nokia, which is now the principal owner. Hollming still owns just over

30 percent of Salora and the Swedish state owns 30 percent of Luxor, but both play the role of a relatively silent partner.

At the time of the takeover, both companies had been almost completely reorganized.

Luxor owner and founder, the legendary Axel Holstensson, was forced just before his death to see his life's work sold to the Swedish state for 1 krona. The crisis lasted until 1981.

The Luxor management was accused of exchanging TV sets for automobiles for private use at about the same time that Salora exchanged TV sets for favors from those in power.

During these dark days, however, new products were quietly produced. One example is Luxor's computer, which proved to be a shot in the arm--at first.

Hectic

Today the pace is fast at both Salora and Luxor, but that is a must--this is a hectic business.

Last year Salora's volume increased by 40 percent and that of Luxor increased by 30 percent. This year it is estimated that the group will gross over 2 billion marks. The figures for the first quarter showed a 26-percent increase in sales.

Profitability? "That is close to our heart," Lagerroos said. "Last year, both sections were definitely profitable, but we are trying hard to increase profitability. We believe these efforts will bear fruit in 1986."

Floating Boundary

In addition to TV sets, Salora's assortment of products includes audio products (purchased from other companies), pay-TV systems, satellite TV receivers, video recorders, monitors, computer terminals, digital picture transmission systems, microcomputers, hybrid circuits, and power units.

The large Motala complex consists of 90,000 square meters on two levels near the center of town. There are three production lines: consumer electronics account for 60 percent of the sales, industrial electronics for 25 percent, and computers for 15 percent.

Consumer electronics means primarily TV sets. The cabinet is made at Luxor's plastics factory near Vadstena. The picture tube comes from the Japanese firm Toshiba. The "chassis," as Jehander calls the electronics, is produced in Motala.

"The boundary between consumer and professional electronics is floating more and more," Lagerroos said.

The Black Box And The Black Hole

The big seller and the flagship product at Luxor is the satellite TV receiver. It initially took 25 percent of the American market and it has remained at that level despite increasing problems: a falling exchange rate on the dollar and a tighter market.

Patent problems and a decline in viewer and advertiser interest in previously "big" TV countries have begun to create problems.

The Magic Box, the black box, provides satellite reception only if certain other technical equipment is available. The box can be installed inside the set. TV dealers like it, since it is a detachable module that requires little additional storage area.

"Even a layman can install it," said Jehander, who is able to do the trick even though he is an economist. Many customers prefer to show it off beside the TV set, however. The latest model is less crude and more designed.

The Salora set has a "black hole," with space for a channel selector. The latter is already being manufactured at the Salora plant in Kemijarvi.

Lagerroos is proud of it and believes it has a bright future: "The market is totally unsaturated. There is no chance for growth in the traditional markets, but totally new markets are opening in this area."

Waiting For Decision

In Finland, the black box is a political issue. It is not just that the Market Court has criticized Luxor's marketing techniques. The politicians have not yet decided how much the technology of TV transmission should be controlled.

While waiting for the decision, Antti Lagerroos sits in his summer cottage and watches 12 different channels.

"We believe it is clear from section III of the Legal Code that we are free to transmit programs and, especially, no restrictions shall be made as to how they are transmitted."

Thus, future sales may be dependent on political decisions. Will this mean manipulation and haunting the corridors of power?

Lagerroos: "That is not a part of our corporate image. We are just manufacturers. As such, we humbly listen to politicians, newspapers, and other experts and take their advice."

His well-known sharp tongue did not let him down.

'Home Computer' That Never Was

Motala's second production line is for computers, which had a difficult time on the market last year. The original Luxor computer, the ABC 80, was introduced as a "home computer." Later, this term came into ill repute and it is now almost identical with the word "toy."

"We were too early," Jehander said, "and we still are."

Now they speak of the "personal computer" and it now has two big brothers with units that can be connected to several workplaces. They are also compatible with each other and with Nokia's computers. So far, 60,000 Luxor computers have been produced in Sweden.

Despite all these adjustments to the market, sales are down. IBM is coming on strong and has made inroads into the retail network. Luxor's computers are "unofficially" compatible with IBM. Luxor has adapted itself. It is also happy to be one of the four manufacturers approved for basic computer contracts with the Swedish state.

"This opens the door to major deals in the public sector."

Abundance Of Products

The field of industrial electronics has many faces. Salora-Luxor is a major supplier of automotive electronics to Volvo and Saab.

OEM (Original Equipment Manufacturers) means electronic control systems that are built into washing machines, dishwashers, sewing machines, and oil furnaces. Modems for data transmission are sold to telephone companies.

A carrier frequency system is a new Swedish invention, still in the pilot stage, that can transmit signals through the ordinary electricity network. The company has also developed electronic monitoring systems for use against shoplifters.

The situation in Salo is similar. There is an abundance of new products. A portable miniunit for welding--said to be the world's smallest--has been developed there. It is marketed by AGA.

Consumer electronics is a rapidly growing field. Two years ago monitors worth 10 million marks were sold. Last year this figure increased fivefold and this year sales will total at least 300 million, according to Lagerroos.

Pertti Karppinen uses an electronic pulse measurer when he is in training. A thin band around his chest sends wireless signals to a device that looks like a strange watch.

TV As Movie Screen?

Digital picture processing and transmission are used to interpret X-ray pictures. Digital TV will be in the stores during the eighties, according to Lagerroos. "High Definition TV" is still further in the future.

What about TV as a movie screen? Lagerroos: "Twenty years ago the answer was 'in 20 years.' Today the answer is probably the same."

Unfortunately, the confusing variety of standards is not a passing phase in the competition. The production technology is similar, however, in all electronics. Where does one gain a competitive advantage?

Antti Lagerroos: "Give several people a similar axe and the same amount of wood. In principle, anyone can chop wood, but after a while the piles will be different sizes. Know-how and efficiency are the decisive factors."

But efficiency does not come from redundant production. Lagerroos and Jehander are silent on this question. The competitors are listening.

Short-Term Planning

Jehander was at Elektrolux for 16 years. There they had the "Gang of Four" in top management positions--four well-coordinated people who made the important decisions. It is believed that he liked it that way.

But the computer and TV sectors are even more turbulent. The products have a short lifetime. It is extremely hazardous to tie up too much capital.

Jehander is critical of the obsession of the seventies: detailed long-term planning! "It is meaningless. Our strategy must be tested in the short term. We must have a vision, but also the capacity and the ability to change quickly."

Today telephones, data, sound, pictures, and text are integrated. The boundaries between manufacturers are in motion.

Who produces what? Ericsson is already making computers and Nokia is making (mobile) telephones. Are there additional mergers and restructuring lurking in the future?

Lagerroos does not seem to reject this idea. He speaks so much about Nordic cooperation that you think you are at a session of the Nordic Council.

"In industry, however, we achieve results," he said.

9336

CSO: 5500/2860

FINLAND

BRIEFS

USSR PHONE LINES TO FINLAND DOWN--From Finland to the Soviet Union there are 16 telephone lines, of which only 10 were in operation on Thursday. The Postal and Telecommunications Administration did not know the reason for the breakdown. Calls were limited to nine minutes in length due to the heavy traffic. Such procedures are permitted by international agreements. Sometimes the time limit has been 12 minutes. The practice of accepting only a certain number of calls is now no longer allowed. [Text] [Helsinki HELSINGIN SANOMAT in Finnish 20 Sep 85 p 11] 10576

FRANCE

ALCATEL-THOMSON FUTURE TIED TO EXPORTS

Paris L'USINE NOUVELLE in French 25 Jul-8 Aug 85 pp 16-17

[Article by Jean Pierre Jolivet: "Alcatel-Thomson in Search of an American Partner"]

[Text] Alcatel-Thomson is standing at the crossroads. In the weeks to come Georges Pebereau and the public authorities will have to reconcile European cooperation with a commercial breakthrough on the American market. The future of French telecommunications depends upon it.

"The future of French telecommunications is tied to the American market." Georges Pebereau, officially in charge of the only national telephone center since 1 July, is convinced of this and has intensified his efforts to find a partner from across the Atlantic. Who will open the gates to this fabulous market for him? From now until 1990, 40 percent of the world sales of telecommunications equipment will be made there. The goal of the CGE [General Electric Company] manager is to conquer 8 to 10 percent of the American market by 1989, some \$200 million per year.

However, today time is pressing for Alcatel-Thomson. Its main competitors at world level have multiplied their alliances, thus reducing the number of potential partners. The latest development is the recent opening of negotiations between the German Siemens and the American GTE [General Telephone and Electronics Corporation]. This only corroborates Georges Pebereau's analysis: In the coming years the telecommunications battle will be fought in the United States.

This should bring new life to the planned alliance between Alcatel-Thomson and AT&T. The conclusion of this alliance is dependent on the good will of the public authorities.

The draft agreement, which has been under negotiation for several months, is quite advanced in its details. It provides for the creation of a joint company with a French majority with AT&T-Philips Telecommunications (ATP, a subsidiary of both groups set up in 1983). This company will group CGE and TRT [Radioelectric and Telephonic Telecommunications] (a French Philips subsidiary) in the field of radio relay systems. Abandoning its own production, AT&T is thus to market the French radio relay systems in the United

States. Concurrently, AT&T is to include the Alcatel-Thomson E10-Five telephone exchange in its catalog by adapting it to the American standards. In return, the French market will be opened to AT&T's ESS-5 digital exchanges at a rate of 16 percent of the annual orders. These exchanges would be manufactured under license by CGCT [General Company for Telephonic Constructions].

Will the Reciprocity of Markets Always Work?

Well "put together," the agreement negotiated by Georges Pebereau has so far been blocked by the veto of the highest French political authorities and remains suspended. There are several reasons for this. First, the present mood is one of European cooperation, with the start of the RACE [R&D in Advanced Communication Technologies for Europe] program and the launching of Eureka, programs for which France has always volunteered. Second, the opening of the domestic market to the American giant contains certain risks. As a manufacturer of equipment, AT&T has not totally abandoned its role as network operator and could--thanks to the worldwide movement toward deregulation--be pitted against the DGT [General Telecommunications Administration]. Finally, the E10-Five added to AT&T's catalog has a sales prospect of only 18 months on the American market. Indeed AT&T is developing an exchange with an equivalent capacity (less than 10,000 lines) which should be ready by 1987. In that case the reciprocity of the markets would disappear.

Even though the dossier is now in government hands, it has not been buried. It may even receive government support in the coming weeks, provided some modifications are made. In return for a reinforced technological agreement between Alcatel-Thomson, Siemens, Italtel, Plessey, and even the Spanish Telefonica (concerning the development of digital telephone exchanges in the nineties), CGE's chief executive officer will get the green light for a commercial agreement with AT&T.

25006

CSO: 5500/006

FRANCE

BRIEFS

JAPAN BECOMES 'SPOT' CUSTOMER--The Japanese government decided to buy the photos taken by the French earth-observation satellite "Spot" that will be launched on 15 November by the Ariane rocket, the Japanese agency Kyodo indicated on 10 September, quoting officials of the Agency (Ministry) of Science and Technology. The 750-million-yen contract (about \$3.1 million) will be signed for Japan by the National Space Development Agency (NSDA), which at present is a client of the U.S. Landsat system. But "Landsat 5," which is now in service, will stop broadcasting early in 1987, and NASA is not planning to launch its successor before the end of 1988, the Japanese officials quoted by Kyodo indicated. The photos bought from France will be disseminated in various Japanese administrations, in particular the Defense Agency, the officials added. [Text] [Paris AFP SCIENCES in French 12 Sep 85 p 27] 9294

NEW FRENCH TELEMATICS COMPANY--Bull, the nationalized computer manufacturer, and the private company Jeumont-Schneider, specialized in particular in private telephone equipment, decided to form a partnership to create a joint study company in order to develop new products in the field of telematics, the two French companies announced in a communique published on 23 September. The joint subsidiary, in which Jeumont-Schneider will have a controlling 51-percent interest, "will look for new solutions to the challenges presented by the rapid convergence of telecommunications and data processing," the same source indicated. The creation of this company does not throw back into question Bull's and Jeumont-Schneider's independence; rather, its goal is to solve the difficult problems resulting from the connection of data processing and telecommunications, the communique indicated. [Text] [Paris AFP SCIENCES in French 26 Sep 85 p 43] 9294

TDF ORDERS NEW SATELLITE--TDF, that is, Telediffusion de France, has just ordered a second live television satellite from Eurosatellite. It will be called TDF-2. Eurosatellite is a joint subsidiary of Aerospatiale and Alcatel-Thomson-Espace which works in cooperation with a German firm and a Belgian firm. This new order represents a contract of more than half a billion francs for Eurosatellite. The launching of TDF-2 by the Ariane-4 rocket will take place in the middle of the year 1988. [Text] [Paris Domestic Service in French 1245 GMT 1 Oct 85 LD]

CSO: 5500/2510

ITALY

STET IMPROVES PROFITABILITY, INCREASES INVESTMENTS

Milan NOTIZIE ITALTEL in Italian Jul 85 p 5

[Text] 450 Billion Lire for Research and Development

STET [Telephone Finance Corporation] closes the fiscal year 1984 with a before-taxes profit of 313 billion lire, which is therefore greater than the corresponding figure for 1983 of 284 billion; the net profit, however, of 273 billion contrasts with the net profit of 342 billion for the preceding fiscal year. This contrasting behavior has its origin in the progressive exhaustion of the possibilities for effecting tax adjustments based on losses generated in previous fiscal years.

The consolidated figures for the group provide a better measure of this dissimilar behavior: here, the net profit is in fact 448 billion lire, whereas in 1983 it was 479 billion. The before-taxes figure, however, was 928 billion, and therefore 47 percent greater than the figure of 630 billion for the preceding fiscal year.

These figures reflect a favorable course of events in 1984 in the area of operations. The progress of the group in 1984 can be summed up in several significant data: the consolidated receipts of more than 11.2 trillion lire represent an increase of approximately 22 percent over the figure for the previous fiscal year, and aggregate receipts, in turn, came to more than 12.8 billion lire.

Specifically, in the service sector the growth of telecommunications traffic exceeded the forecast and partially compensated for the approximately 400 billion lire of income that was not received as a result of the delay in implementation of the new telephone rates. The behavior of the manufacturing and installation sector is significant: it accounted for receipts of 3.8 trillion lire (up 26 percent over the figure for 1983), of which total more than 1.5 trillion lire represented sales abroad and therefore accounted for 40 percent of the total.

An Investment of 4.7 Trillion

To sustain this development it was necessary to invest a total of 4.765 trillion lire, while employment reached 136,000 by the end of 1984--an increase for the year of 2,900 (up 2 percent from the figure for the end of 1983). A particularly strong effort was also made to intensify research and development activities, which entailed expenses and investments totaling 450 billion lire.

Even with the limitations mentioned above, the group was able in 1984 to grow stronger both economically and financially.

In particular, the consolidated gross operating margin increased by 28 percent over the figure for the previous year (to 4.811 trillion from 3.753 trillion) and made possible a larger allocation for amortizations totaling approximately 826 billion lire, in line with the minimum requirements for sustaining the very large amount of investments without further aggravating the phenomenon of indebtedness.

In fact, the cash flow served to cover approximately 60 percent of the amount required for investment, helping in this manner to contain the overall financial exposure and therefore the growth of the relative debt charges, whose impact--as a percentage of receipts--was further reduced by 1.5 percentage points (to 16.9 percent from 18.4 percent). Specifically, this impact amounted to 5 percent for the manufacturing sector and more than 20 percent for the service sector.

The overall financial exposure at the close of the fiscal year was 13.277 trillion lire (compared to 11.071 trillion at the end of 1983), 94 percent of which was consolidated as medium- and long-term debt.

The fiscal year 1984 accordingly followed a course that was characterized by a sequence of positive results that confirm the validity of the strategic choices made over the past few years by the group, and of the effort made by all the associated companies to refine management techniques and improve technical and commercial operations.

A Constructive Relationship With the Union

An important contribution in this regard was made in the form of a frank and effective relationship with the trade-union organizations--a relationship which although not devoid of difficulties has proved in the main to be positive. Nonetheless, even in 1984 the activity of the group continued to be affected by delays and obstacles that have their origin outside the companies and the market. The year 1984 demonstrated once again that it is essential for STET to reduce the level of vulnerability to which the service sector in particular is exposed in the current context of regulations and rates.

The electronic sector that is represented by STET is henceforth an important international reality, and at the same time a complex of potentialities that can make a further--and a decisive--contribution to the development and modernization of the Italian economic system. The expression of these potentialities, however, requires the resolution of certain problems.

Special attention should be given to the research effort that the electronic companies of the group will have to make in order to accomplish the strong growth in receipts that has been planned. This effort will be translated, during the 5-year period from 1985 to 1989, into an expenditure of 3.25 billion in current lire on research and development--a period that corresponds on the average to 11.5 percent of receipts for the period. In turn, the investment in equipment and research laboratories will come to approximately 580 billion lire over the 5-year period, or 22 percent of the total investment in the program.

Telecommunications and Jobs

Governmental cooperation in covering the costs of research and technological innovation therefore takes on a fundamental importance for the future of the manufacturing sector of the group.

In 1984, at the level of the entire group, there was a slight increase in employment together with a 20 percent increase in aggregate receipts. This provides clear evidence of the increases in productivity made possible by new techniques of which the group is--at one and the same time--both the producer and the user, and also of the two aspects of the complex employment problem that the group itself will have to face: first, the change in the composition of its own labor force, in whose ranks secondary-school graduates and college graduates are tending to become the largest component, and second, the regional distribution of the labor force, which will entail a special and continuing effort to strengthen the technical and organizational bases for the presence of the STET Group in the South.

In any event, it is essential to realize that the public telecommunications services and electronics are of themselves a source of employment that is assuredly important but that is not destined to have a particularly significant growth. On the other hand, these sectors do play a decisive role in promoting--and therefore in supporting--the jobs that are being created in other branches of activity: in short, they constitute an essential infrastructure for a modern society and economy.

10992

CSO: 5500/2858

ITALY

ITALTEL, CIT ALCATEL, SIEMENS, PLESSEY TO SHARE KNOW-HOW

Milan NOTIZIE ITALTEL in Italian Jul 85 p 5

[Article by Vera Gandi: "And Now We Are Four"]

[Text] Another forward step toward the "Europe of Telecommunications" was taken on 25 April in Paris: the agreement on technical collaboration in the area of public electronic switching systems that has been in effect since last January among Italtel [Italian Telecommunication Company], the French Cit Alcatel [not identified], (CGT [General Telephone Construction Company] Group)) and the German Siemens was officially extended to include the British Plessey, which had already announced its decision to participate in this collaboration.

The agreement was signed by Marisa Bellisario, managing director of Italtel; Sir John Clark, president of Plessey; Karlheinz Kaske, president and managing director of Siemens; and Georges Pebereau, president and general manager of CIT Alcatel.

The agreement was also signed by GTE [General Telecommunications Company] and Telettra [Electronic Telephone and Radio Systems Company], the two telecommunications companies which together with Italtel constitute the national pole for public electronic switching systems. The exchange of experience and know-how among the major European manufacturers of telecommunications systems is in this way being extended to all the companies of this national pole.

Italtel, CIT Alcatel, Siemens and Plessey envisage the joint development of hardware and software modules for their respective digital telephone exchanges. The preparatory studies, which were begun in January, are being carried out by technical committees composed of representatives of the four companies, who meet at regular intervals to discuss the results of the work done "at home" in their respective laboratories. Overall technical coordination is entrusted to a committee of eight, which meets three times a year; Italtel is represented by Alessandro Bellman, chief of the Technical Division for Electronic Switching Systems, and Maurizio Decina, chief of Research and Development. The meetings are held on a rotating basis in Milan, Paris, Munich and London.

Currently, this joint activity concerns two basic elements of the telephone exchanges: the cards for user access, which make the connection between the exchanges and the telephones; and the operators' stations, that is to say,

the interface between the exchange and the supervisory personnel. Tens of thousands of highly integrated components, developed expressly for telecommunications, are inserted into the user-access cards. The four European partners are specifying the characteristics of these components, which will be uniform for all the user cards of the respective telephone exchanges, not only the present cards but those of the future integrated system (LSDN) [not further identified].

The increase in the volume of components will make it possible to effect economies of scale and therefore to reduce the cost of the systems inasmuch as the user cards represent approximately half of the cost of the hardware.

For the operators' stations, uniform procedures are being developed to standardize the modalities of the dialogue between an exchange and the operators who supervise their operation and maintenance.

A "natural" consequence of the standardization of the components and procedures for use and maintenance is the development of high-compatibility telephone exchanges that are suitable for operation in the various countries without costly adaptation to the diverse technical specifications of the PT [Post and Telecommunications] managements. If this course is followed, it will be possible to achieve the "Europe of Telecommunications"--a market of continental dimensions, the only one capable of yielding a return on the investment.

10992

CSO: 5500/2858

ITALY

ITALTEL PROFITS MORE THAN DOUBLED IN 1984

Milan FLASH-NOTIZIE ITALTEL in Italian 7 May 85 p 1

[Text] The Italtel (IRI-STET [Industrial Reconstruction Institute-Telephone Finance Corporation] Group) stockholders meeting, held on 29 April in Milan, approved the 1984 balance sheet of the Italtel Italian Telecommunications Company (SIT), flagship company and principal operating company of the Italtel Group. It took cognizance of the consolidated balance sheet of the group, which showed a positive result, after taxes, of 25.2 billion lire. This contrasts with the 1983 profit of 10 billion lire.

At the consolidated level, receipts totaled 1,199,200,000,000 lire (up 9.2 percent from 1983); the margin from manufacturing activities, after amortizations, increased 21.7 percent to 150.3 billion lire. The financial situation improved considerably in 1984, and an operating surplus of 50.7 billion lire was achieved. Net financial indebtedness was reduced by 4.7 percent from the 1983 figure to a total of 570.4 billion lire. A more favorable composition of the foreign exchange debt was also obtained: specifically, the indebtedness in dollars was reduced to \$58.8 million, compared to \$174.3 million at the end of 1983.

The decisive contribution to the 1984 results came from the Italtel SIT, which showed a profit of 22.9 billion lire, compared to 6.1 billion for the preceding year, and has made possible--as a positive signal to the stockholders--the distribution of a gross dividend of 15.8 billion lire (representing 4 percent of the capital stock) and the allocation of 6 billion lire to the reinvestment fund for use in the south. It was the first dividend distribution since 1973. The board of directors also noted the importance of giving attention to the programs of innovation and development and therefore to the tasks that await Italtel.

Of particular importance from the manufacturing and marketing standpoint is the entry into service, within the SIP [Italian Telephone Company] system, of the UT 10 [expansion unknown] digital telephone exchange--the basic model of the UT line--designed by Italtel and in regular production at the Milan and Palermo-Carini plants. The UT 10 is the second urban digital exchange in service in Italy and is one of the three in the world that are based on distributed-control design, which is today considered to be the most advanced type. In the field of private telecommunications--a sector in which Italtel Telematica [Computer Communications] operates--receipts from the production

of computer-communications equipment and systems increased by almost one-third; the catalog of private electronic exchanges, telephones and terminals has been enlarged to include a new line of products and systems for the automation of office work.

At the end of 1984 the work force totaled 20,254 compared to 21,702 in 1983 and approximately 29,000 in 1980; approximately 2,000 employees work in the research and development laboratories. The consolidated balance sheet--and all the balance sheets of the companies of the Italtel Group--are certified by Price Waterhouse. (Italtel press release of 2 May 1985)

10992

CSO: 5500/2858

ITALY

ITALTEL IMPROVES PROFITABILITY AS PERSONNEL IS SLASHED

Milan NOTIZIE ITALTEL in Italian Jul 85 pp 3, 4

[Article by Marisa Bellisario: "The Year of Consolidation"]

[Text] 15.8 Billion Lire in Dividends

The Italtel [Italian Telecommunication Company] stockholders meeting, held on 29 April in Milan, approved the 1984 balance sheet of the Italtel Italian Telecommunications Company (SIT), flagship company and principal operating company of the Italtel Group. It took cognizance of the consolidated balance sheet of the group, which showed a positive result--after taxes of 25.2 billion lire. This contrasts with the 1983 profit of 10 billion lire.

At the consolidated level, receipts totaled 1,199.200 billion lire (up 9.2 percent from 1983); the margin from manufacturing activities, after amortizations, increased 21.7 percent to 150.3 billion lire. Net financial charges--which were reduced both in absolute and in relative terms--totaled 139.6 billion lire, equal to 11 percent of the value of gross production (compared to 13.1 percent in 1983).

The financial situation improved considerably in 1984, and an operating surplus of 50.7 billion lire was achieved. Net financial indebtedness was reduced by 4.7 percent from the 1983 figure to a total of 570.4 billion lire. A more favorable composition of the foreign exchange debt was also obtained: specifically, the indebtedness in dollars was reduced to \$58.8 million, compared to \$174.3 million at the end of 1983.

The decisive contribution to the 1984 results came from the Italtel SIT, which operates principally in the public telecommunications sector; it closed the fiscal year with receipts of 1,022.600 billion lire (up 6 percent from 1983). Receipts per capita came to 84.2 million lire (up 18.3 percent). The net profit of Italtel SIT was 22.9 billion lire, compared to 6.1 billion for the preceding year, and has made possible--as a positive signal to the stockholders--the distribution of a gross dividend of 15.8 billion lire (equal to 4 percent of the capital stock) and the allocation of 6 billion lire to the reinvestment fund for use in the South. It was the first dividend distribution since 1973. The board of directors also noted the importance of giving attention to the programs of innovation and development and therefore to the tasks that await Italtel.

Of particular importance from the manufacturing and marketing standpoint is the entry into service, within the SIP [Italian Telephone Company] system, of the UT 10 [expansion unknown] digital telephone exchange--the basic model of the UT line--designed by Italtel and in regular production at the Milan and Palermo-Carini plants. The UT 10 is the second urban digital exchange in service in Italy and is one of the three such exchanges in the world that are based on distributed-control design, which is today considered to be the most advanced type. In the field of private telecommunications--a sector in which Italtel Telematica [Computer Communications] operates--receipts from the production of computer-communications equipment and systems increased by almost one-third; the catalog of private electronic exchanges, telephones and terminals has been enlarged to include a new line of products and systems for the automation of office work.

At the consolidated level, expenditures on research and development--106.5 billion lire--bear witness to the process of technological innovation through which Italtel is passing: today, more than half of its products are electronic (all of its computer-communications and transmission products already are). In 1984, a total investment of 53.2 billion lire (31.6 billion in 1983) was made, half of it for the introduction of new products and, to a lesser extent, for design automation, for rationalization of the production processes, and for increasing production.

At the end of 1984 the work force totaled 20,254, compared to 21,702 in 1983 and approximately 29,000 in 1980. The increase in profits shown on the balance sheet, the largely positive results from self-financing, the improvement in the asset structure, the reduction in the financial indebtedness, and the more favorable composition of the foreign exchange debt are some of the elements--described in the balance sheet--that made 1984 a year of consolidation for Italtel.

Of particular importance from the manufacturing and marketing standpoint is the entry into service, within the SIP system, of the UT exchange, the second urban digital exchange in service in Italy and one of the three such exchanges in the world that are based on distributed-control design, which is today considered to be the most advanced type. In the field of private telecommunications, Italtel Telematica increased its own market share--particularly with respect to the private exchanges (PABX)--and increased by almost one-third the receipts from the production of computer-communications equipment and systems; the catalog of PABX's, telephones and terminals was enlarged to include a new line of products and systems for the automation of office work. Satisfactory results have also been obtained in the engineering, installation and equipment maintenance sector, in which Italtel Sistemi [Systems] operates.

In the sector of public telecommunications Italtel has opted for technological innovation, reinforced and complemented by collaboration with other leading companies; this policy--initiated in 1982 with the agreement with GTE [General Telecommunications Company and Telettra [Electronic Telephone and Radio Systems Company for the national system--is continuing today in the form of technological cooperation with CIT Alcatel [expansion unknown], Plessey and Siemens. The four companies are not the largest in the EEC sphere and can be assured of

26 percent of the world market for public switching systems. By means of a pragmatic and realistic policy which we have called a "small steps" policy, we intend to achieve a high degree of compatibility for our systems as a basis for accelerating standardization of the telecommunications systems within the CEE. In this way the reciprocal opening of markets would not entail additional costs, and it will be possible to achieve the "Europe of Telecommunications" by offering better and more efficient services that are compatible in all European countries.

New Products and Aggressive Marketing

Italtel Telematica, which operates in the area of private telecommunications and office automation, collaborates with innovative companies (European, American and Japanese) in connection with particular products and market segments. In 1984 the catalog was enriched with a complete line of products and systems for the automation of office work which have as their central element the PABX--a field in which Italtel is a technological and marketing leader. These new products, combined with aggressive marketing, have made possible the attainment of significant goals: today, the activities connected with computer communications account for more than 70 percent of the receipts of Italtel Telematica and engage approximately two-thirds of the work force. In 1983 these percentages were 60 and 53 percent, respectively.

In 1984 we took more decisive action with a view to diversifying products and markets: for example, in the areas of defense telecommunications, domestic computer-communications services, and exports. In the latter connection, contracts worth a total of more than 90 billion lire have been awarded either directly or through Italcom.

Electronification of the Computer-Communications System and Services

The prospects for public telecommunications (which are the basic component of our activity) point to a modest increase in domestic revenues linked to a telecommunications plan, with investments spread over a period of time and directed toward a normal growth of telephone usage and toward the replacement of technically obsolescent installations. We shall look with favor upon a stimulus from the plan that will accelerate investment in the electronification of the system and in the aggressive development of the new computer-communications services. Positive steps could also be taken to increase our domestic industry's share of the Italian market, with a view to creating conditions for ourselves that are more in line with those in the other EEC countries, in which the largest manufacturing company is also the overall leader in the market. A larger market share in Italy would improve the competitive position abroad, where market conditions are increasingly more difficult and are linked not only to technical considerations but also to financial and political factors. It should also be noted that for the next several years exports can have only a limited effect on the growth of our sales, because of the long intervals that take place between the awarding of a contract, the receipt of the order and the initial deliveries.

Innovation: An Indispensable Choice

In 1984 we concentrated on innovation with a strong commitment, as the following figures will show: A total of 106 billion lire was spent on research and development, which can now begin to be utilized by a network of computers and terminals used in design and in this way share methodology and data. A total of 53 billion lire was invested in technical fixed capital, more than half of it destined for the introduction of new products. It was also used for automating design, rationalizing production processes and increasing production. A total of 19 billion lire was spent on the training and advanced training of personnel.

For Italtel innovation is an indispensable choice even if it does entail sacrifices in the area of employment, because of the lesser value added in the manufacture of electronic products; without innovation, moreover, employment problems would inevitably become more serious and difficult to manage over the medium to long term.

On the basis of the current Italtel 5-year plan for 1985-1989, a surplus of personnel is still to be expected. Our priority task, however, is to explore new market opportunities and develop new industrial initiatives that can have positive effects in the area of employment. Positive effects could, moreover, derive from additional plans--adopted at the governmental level--for the domestic public telecommunications and computer communications market.

Technicians and Specialists: New Hiring

The future of Italtel will see its technicians and specialists playing an increasingly important role. The change in the composition of our work force has been accelerated by the hiring of young people: since 1983 more than 450 recent college graduates have joined the company, 80 percent of them destined for the research and development activities at the laboratories in Milan and the south central region. In the 1990's a large proportion of Italtel's jobs will be in the areas of research and development, technical support, and services, with a much more balanced distribution among the various sectors of production and--within those sectors--among designers working in production, support personnel and marketing personnel. The diverse mix of jobs is also relevant to our technological autonomy and to our presence as a leader in the market--conditions that are indispensable to the protection of jobs.

Table 1. Some Data From the Italtel Consolidated Balance Sheet

	<u>1984</u>	<u>1983</u>	<u>1980</u>	Variation <u>1984/83</u>	Variation <u>1984/80</u>
Total receipts (billions)	1.199.2	1.097.6	503.0	+9.2%	+138.4%
Per capita receipts (millions)	57.9	48.8	17.6	+18.6%	+229.0%
Gross operating margin (billions)	219.0	201.8	11.7	+17.2 billion	+207.3 billion
Amortizations (billions)	68.7	78.3	37.4	-12.3%	+83.7%
Manufacturing margin (billions)	150.3	123.5	-25.7	+26.8 billion	+176.0 billion
Net financial charges (billions)	139.6	148.7	110.6	-6.1%	+26.2%
Result of fiscal year (billions)	25.2	10.0	(1)	+15.2 billion	(2)
Net surplus stock (billions)	461.1	390.8	468.5	+18.0%	-1.6%
Net financial indebtedness (billions)	570.4	598.6	734.2	-4.7%	-22.3%
Own funds (billions)	440.0	308.1 ⁽³⁾	76.0	+131.9 billion	+364.0 billion
Research and development (billions) expenditure	106.5	100.6	71.0	+5.9 billion	+35.5 billion
Personnel as of 31 December (numbers)	20,254	21,702	28,713	-1,448	-8,459
Dividend per share ⁽⁴⁾	40	--	--	(2)	(2)

-
1. The result of the 1980 balance sheet benefited from increases in the value of subscribed capital relative to capital assets, in the amount of 232.7 billion lire, which made it possible to cover the business losses.
 2. Nonsignificant
 3. Italtel SIT also had at its disposal, in 1983, interest-free FIO [expansion unknown] financing--under Law No 130/1983--to the extent of 100 billion lire, which was used in 1984 to increase the capital stock.
 4. Italtel SIT

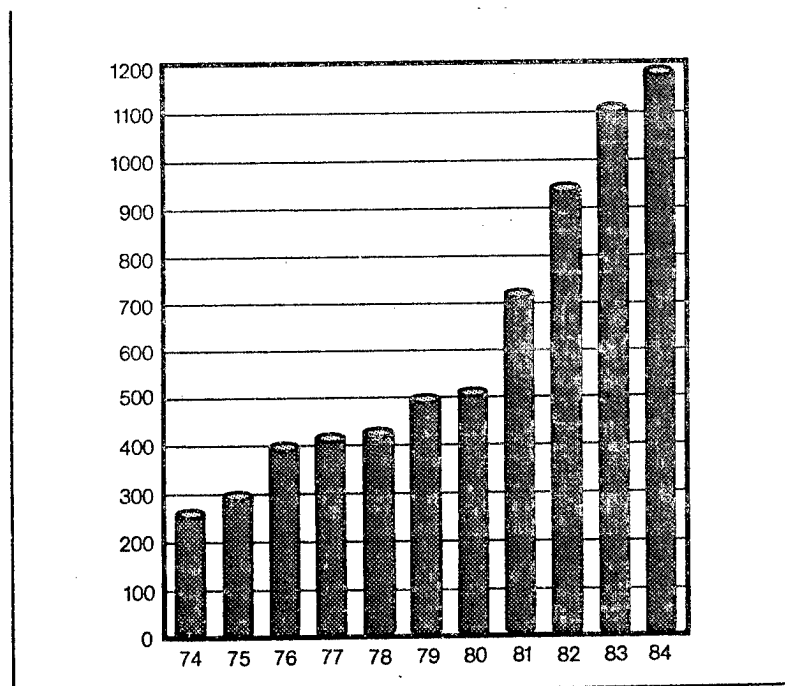


Figure 1. Italtel Group: Receipts 197⁴-198⁴ (billions of lire)

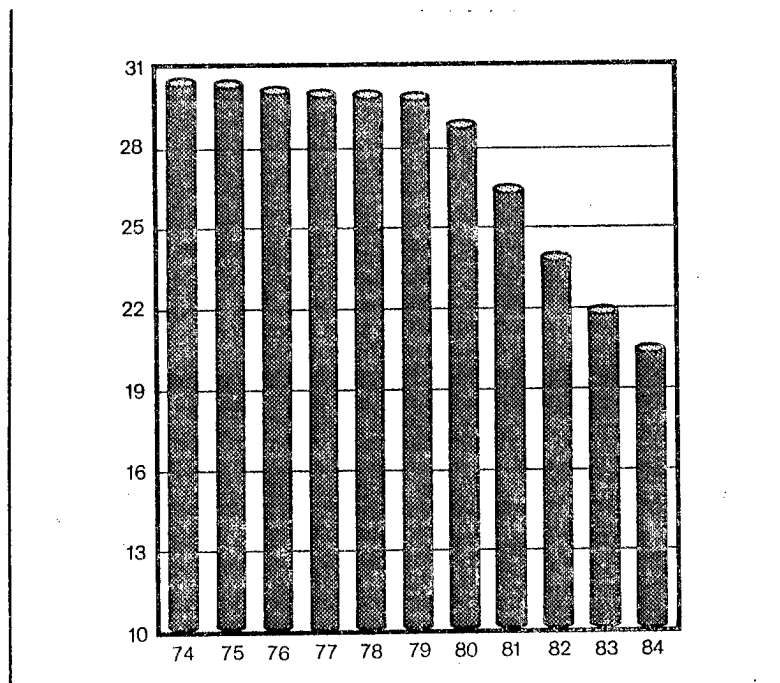


Figure 2. Italtel Group: Personnel 197⁴-198⁴ (thousands)

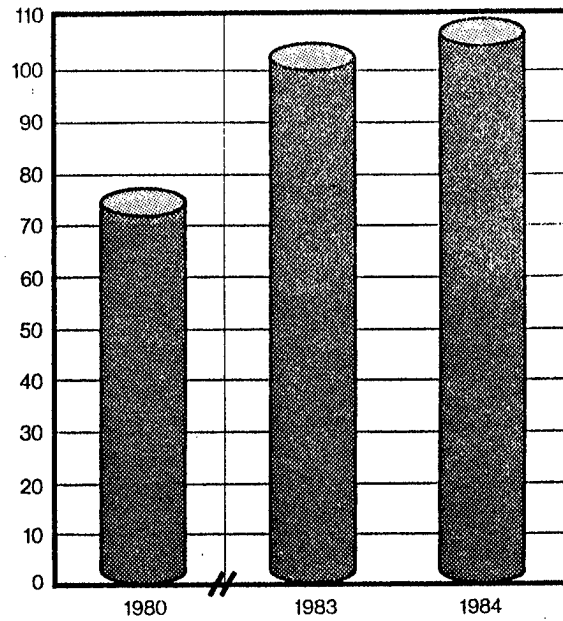


Figure 3. Italtel Group: Expenditures on Research and Development (billions of lire)

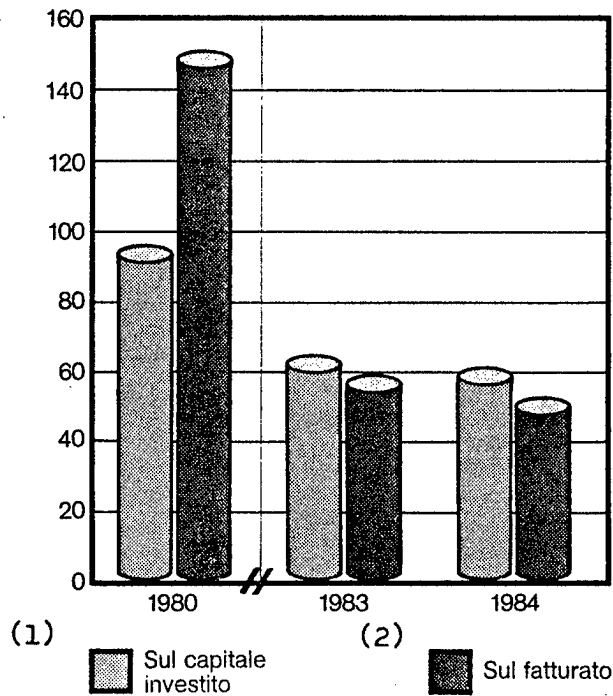


Figure 4. Italtel Group: Net financial indebtedness (impact in percentages)

Key:

1. Of invested capital

2. Of receipts

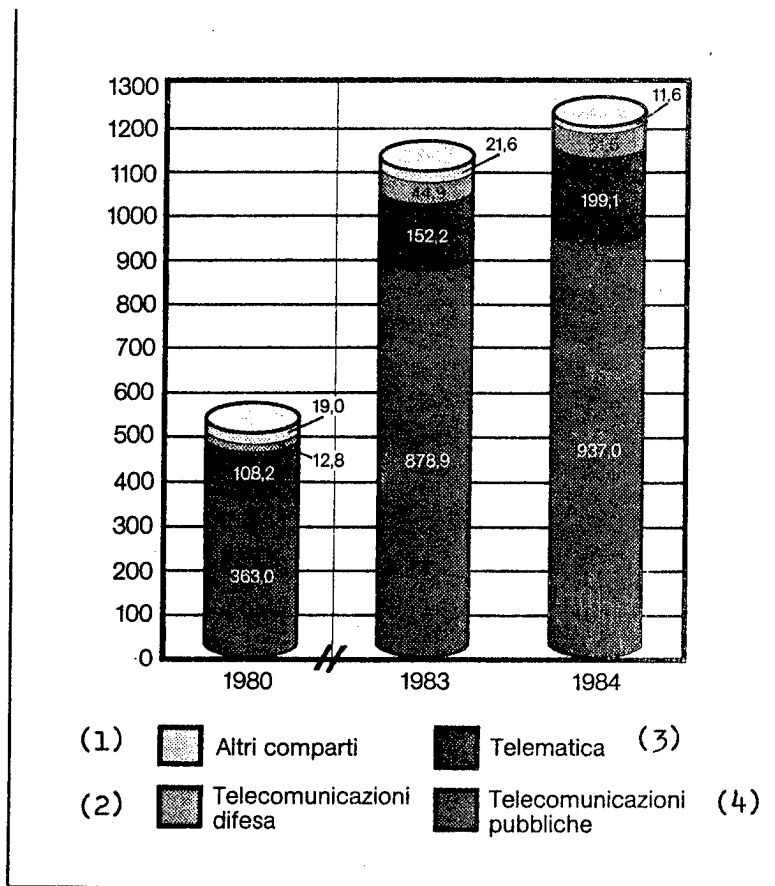


Figure 5. Italtel Group: Receipts of Italtel, by sector (thousands of lire)

Key:

- | | |
|-------------------------------|------------------------------|
| 1. Other sectors | 3. Computer communications |
| 2. Defense telecommunications | 4. Public telecommunications |

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CSO: 5500/2858

ITALY

BRIEFS

IMI FINANCING FOR ITALTEL--Financing in the amount of 100 billion lire--repayable in 8 years on easy terms--has been granted to Italtel [Italian Communications Company] by the IMI (Italian Personal Property Institute) from the funds of the BEI (European Investment Bank) in support of the development programs underway in the South, where Italtel has plants and research and development laboratories in Aquila, Santa Maria Capua Vetere (Caserta) and Palermo. This financing represents the exchange value, in lire, of a basket of European and non-European currencies and is guaranteed by the Italian Government against possible variations in exchange rates. (Italtel press release of 22 April 1985) [Text] [Milan FLASH-NOTIZIE ITALTEL in Italian 23 Apr 85 p 1] 10992

SHARING OF ITALTEL KNOW-HOW--Another forward step toward the "Europe of Telecommunications" was taken today in Paris: the agreement on technical collaboration in the sector of public electronic switching systems that has been in effect since last January among Italtel (IRI-STET [Industrial Reconstruction Institute-Telephone Finance Corporation] Group), CIT [Telecommunications Manufacturing Company]- Alcatel [expansion unknown], (CGE [General Electricity Company] Group) and Siemens has been officially extended to include Plessey, which had already announced its decision to participate in this collaboration. The agreement, which provides for the joint development of hardware and software modules for the respective digital telephone exchanges, was signed by Marisa Bellisario, managing director of Italtel; Sir John Clark, president of Plessey; Karlheinz Kaske, president and managing director of Siemens; and Georges Pebereau, president and general manager of CIT Alcatel. (Italtel press release of 25 April 1985) [Text] [Milan FLASH-NOTIZIE ITALTEL in Italian 30 Apr 85 p 1] 10992

SGS PLANT IN SINGAPORE--With an investment of \$50 million, SGS-ATES [expansion unknown] (IRI-STET Group) has opened a new plant in Singapore for the custom manufacture of integrated circuits for its customers. A center for microchip design is annexed to the new plant; it takes its place alongside the centers already established in Italy (at Agrate, Castelletto and Catania) and in France, Germany, Great Britain and the United States. (From QUOTIDIANI, 23 April 1985) [Text] [Milan FLASH-NITIZIE ITALTEL in Italian 30 Apr 85 p 5] 10992

SGS-ATES SALES INCREASE--For the first quarter of 1985, SGS-ATES (IRI-STET Group) earned receipts of 168 billion lire at the consolidated world level, representing a 17 percent increase over the figure for the corresponding

quarter of 1984. In 1984 consolidated receipts were \$335 million (an increase of 46 percent). [Text] [Milan FLASH-NOTIZIE ITALTEL in Italian 30 April 85 p 7] 10992

OLIVETTI NET PROFIT INCREASE--In the 1984 fiscal year the Olivetti Group earned a net profit of 356 billion lire, compared to 295.3 billion lire in the previous year, on receipts of 4.578 billion lire (3.7362 billion in 1983). The flagship company of the group contributed a net profit of 237.2 billion lire to the overall result. [Text] [Milan FLASH-NOTIZIE ITALTEL in Italian 30 Apr 85 p 7] 10992

GUATEMALAN TELECOMMUNICATIONS DEVELOPMENT PLAN--ITALCOM [Italian Telecommunications Systems]: "Piano di sviluppo delle telecomunicazioni in Guatemala [Plan for the Development of Telecommunications in Guatemala] (bilingual edition, Spanish/English). Copies of these publications can be requested--including by telephone--from: Italtel, External Relations, 13 Via A. di Tocqueville, Milan 20154. Telephone: (02) 43885112/43885136. Exchange rates (UIC [units of Italian currency] average as of April 1985): U.S. dollar, 2012.60; Canadian dollar, 1475.75; mark, 638.22; French franc, 209.66; Swiss franc, 764.60; British pound, 2416.80; yen, 7.96. Documentation and Sectoral Studies, Office of External Relations. Telephone: (02) 43885112. [Excerpt] [Milan FLASH-NOTIZIE ITALTEL 30 Apr 85 p 8] 10992

SIP INVESTMENT PLANS--SIP [Italian Telephone Company] (IRI-STET Group), which in 1984 earned a net profit of 185.3 billion lire, will--in view of the extension of its activities to new services (in 1984 it installed 16,000 data-transmission terminals)--assume the new name, SIP-Italian Company for the Use of Telecommunications. At the close of last year there were a total of 16,521,000 telephone subscribers in Italy, with 24,331,000 instruments in service; the telephone density reached 42.6 instruments per 100 residents. Approximately 12 billion urban conversations and 5 billion extra-urban conversations took place over the 1.2 billion kilometers of the system. For 1985, the SIP has planned a total investment of 4.4 billion lire (4.185 billion in 1984). (From QUOTIDIANI, 1 May 1985) [Text] [Milan FLASH-NOTIZIE ITALTEL in Italian 7 May 85 p 3] 10992

CSO: 5500/2858

SWEDEN

NORDIC COUNTRIES GET FIRST EUTELSAT EARTH STATION

Stockholm DAGENS NYHETER in Swedish 18 Sep 85 p 64

[Article by Anders Falkirk: "New Satellite Station Gives Better TV Pictures"]

[Text] Scandinavia's first telesatellite station in the Eutelsat system was dedicated yesterday. The station which is located in Agesta outside of Stockholm will expedite TV programming between all of Western Europe and Scandinavia.

The station is owned and operated by the National Telecommunications Administration and consists of two smaller antennas and a gigantic, white parabolic antenna 18 meters in diameter, and as it is facing South at all times it is most reminiscent of a gigantic sundial.

Yet, it is not the sun toward which it is directed, but rather toward a communications satellite at an altitude of 36,000 kilometers above the equator near Nigeria. A degree of accuracy that would be the equivalent of the antenna's "picking up" a 5-kronor piece at a distance of 400 kilometers.

Latest Link

Construction of the Agesta Station was started in 1983, and it will be the latest link in the Eutelsat system, a European cooperative venture in which the Scandinavian telecommunications establishment participates. All in all 20 countries in Western Europe participate, the purpose of the collaboration being that TV and telecommunications among the various countries will be improved and made more efficient with the help of communications satellites.

"Earlier, all transmissions among the various European countries went over a series of ground-based radio links," explains Thomas Jarne of the National Telecommunications Administration satellite office. "It became expensive and unwieldy as each country assessed higher tariffs to permit a transmission across its territory. Moreover, the quality became worse as the signal had to be "rebounced" several times before it came across to the receiving country. If Swedish Radio wanted to make a direct broadcast of a pop music festival in Spain, it meant that before the pictures came to Sweden, they had to pass through a network of radio links in France, West Germany, Denmark, etc."

The largest user of the Eutelsat system is the European Broadcasting Union (EBU) in which Swedish Radio participates. The EBU has a comprehensive TV-exchange among the member countries; shorter features and entire programs are exchanged among the various programming companies. Twice a day these countries exchange news and sports features with each other, and these can be shown later in the day to respective TV audiences.

Live Aid

"The station in Agesta was in fact used earlier in the summer. During an extended trial run we managed to broadcast the now so famous Live Aid gala from London. Thus the station can be used both for direct telecasts of major international events and for shorter features to be taped in the respective home countries," Thomas Jarne points out.

"Around Europe there are 11 similar installations for the reception and transmission of TV programs via satellite, and the system will be expanded and built up further."

Ever More Efficient

For every telesatellite station built the system becomes more efficient, the quality of the transmissions is improved. This applies to both TV communications and the processing of telephone calls.

"Actually the TV broadcasts are only a service which the National Telecommunications Administration provides to Swedish Radio. Telecommunications are naturally the most important for us, but it will not be until next spring that we can start up that part of the operation at the Agesta station," Thomas Jarne tells us.

At that time, the capacity will be at 1,920 simultaneous telephone calls within Europe, and the National Telecommunications Administration hopes that within three years the station will be able to handle 3,200 simultaneous calls.

Moreover, a large portion of the European connections for Finland, Norway and Denmark will be routed through Agesta.

"Fully developed, the system can handle 12,000 simultaneous telephone transmissions and two TV channels, but this will not take place until some time in the 1990's," Thomas Jarne of the National Telecommunications Administration believes.

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CSO: 5500/2865

SWEDEN

BRIEFS

TELECOMMUNICATIONS AGENCY INVESTMENT EXPENDITURES--From 1986 to 1989 the Telecommunications Service plans to invest almost 26 billion kronor. Most of this sum--16 billion kronor--will be invested in the telecommunications network. Large investments will be made to make it easier to call. The goal is for at least 98 percent of all daytime long-distance calls to be completed. The figure is now 97 percent. According to the agency's 3-year plan, telephone traffic is expected to increase 4 percent annually, while data communications will continue to increase 30 percent each year. [Text] [Stockholm DAGENS NYHETER in Swedish 3 Sep 85 p 12] 9336

COMPUTER SOFTWARE FOR VIDEOTEXT--On 1 September, the Telecommunications Service will replace Ericsson as owner of Scandinavia's largest software company in the field of data communications. This will occur when the Telecommunications Service, through Teleinvest AB, takes over one third of the stock in AU Network, the parent company in the AU-System group. As before, the other stockholders in AU Network are AB Programator and the employees. The part ownership means much-expanded cooperation in areas such as videotext and other public network services. [Text] [Stockholm DAGENS NYHETER in Swedish 28 Aug 85 p 10] 9336

CSO: 5500/2860

SWITZERLAND

PTT TO CONTINUE VIDEOTEX DESPITE SETBACKS

Zurich DIE WELTWOCHTE in German 19 Sep 85 p 43

[Article by Ueli Haldimann: "Having Spent 150 Million, There is No Turning Back" / Despite Failure of Operational Testing, Videotex is Definitely to Be Introduced in 1986]

[Text] Instead of conjuring up futuristic visions as previously, the Swiss Videotex community will have to go over its books. After 2 years of operational testing, Videotex scored a complete failure with the public; the targeted member figures clearly did not materialize. The otherwise professionally optimistic Videotex magazine "vt" summarizes resignedly, "the euphoria of the first Videotex Congress has given way to sobriety, or worse. The present situation is anything but promising."

Yet until a short time ago, Videotex promoters had announced the coming of the electronic communications paradise, made possible through Videotex, in the near future. In the future, the average consumer in Switzerland would be able to book or order, respectively, from his living room the inter-city flight to Amsterdam, the vacation apartment in Adelboden, and the canoe from the Jelmoli catalogue shop, and thanks to Telebanking, he would charge these products and services to his bank account via Videotex. Shopping catalogues, telephone books, even libraries are passe--all supplanted by Videotex. Originally, PTT [Post/Telephone/Telegraph] counted on 250,000 households to be connected up by 1990. A study frequently cited by PTT even counted on a 30 percent penetration of households, i.e., about 600,000 participants. Videotex has been tested by PTT in a pilot operation since 1979; since the fall of 1983 there has been operational testing through which PTT and information suppliers can accumulate experience. Since a strong demand for hook-ups was anticipated, operational testing was limited to the Zurich and Lausanne areas where--thus the assumption--among an enormous number of applicants, 1,000 selected trial participants of each sector (half of them private, half commercial) were to be chosen. The user habits of these 2,000 were to be followed by a study for at least one year. This was to be of decision-making assistance to the Federal Council which, after the operational test, i.e. at the beginning of 1986, was to decide on the introduction of Videotex as a public service. So much for the original time schedule.

But the promoters of Videotex made their calculations without the consumers. There was practically no demand; potential Videotex customers were absorbed by the personal computer boom (PC). More than a year after start-up, in October 1984, Videotex had only 500 customers, a large number of them suppliers who wanted to control their own input. And even at the end of April 1985, there were only 1,000 commercial and 400 private hook-ups.

This brought PTT into conflict with its own time schedule. For reasons of representation, it needed 2,000 participants for the accompanying study, 1,000 of whom were to be polled. Still in October 1984, PTT President Hanse Werner Binz stated: "The one-year study can begin when we have 2,000 subscribers." (KLARTEXT, 5/84). Although restriction to the Zurich and Lausanne areas had long since been dropped, this magic number of 2,000 was reached only now, at the end of August 1984. According to Binz, the one-year study could begin as of now. But this doesn't work, because the study report was supposed to have been completed in October 1985. Otherwise, the rest of the timetable could not be met.

In their need, PTT and the contracted research consultants, the "Interdisciplinary Consultant and Research Group Basle," devised a ploy: according to the latest definition, it is sufficient if 2,000 participants are hooked up at the end of the study. "This is called a layered model," says Kurt Freiburghaus, Videotex project manager at PTT. It serves to study how Videotex newcomers use the medium. "This is also quite interesting."

Of course: It doesn't really matter what comes out of the contracted study. Because it has long since been decided that Videotex will be introduced as a public service. According to Freiburghaus, a Videotex regulation is already part of the reporting process of the departments; by the end of the year, a response to an inquiry is to be carried out quickly so that the Federal Council, at the end of 1985 or beginning of 1986, can decide on the introduction of Videotex, for example by 1 March 1986 (again according to Freiburghaus). It is not foreseen that Parliament would change its mind. The regulation is based on the 1922 law concerning telegraph and telephone traffic; later on, it is to be adapted to the new telecommunications law, the draft of which has only now begun its long journey through the official and parliamentary mills of Berne.

From an economic viewpoint, also, the point of no return for Videotex has been crossed long ago. Circles of the SVIPA, the Association of Suppliers of Information, estimate that the participating private firms so far have invested about 100 million Swiss francs in the development of Videotex programs and purchases of external calculators. On the part of PTT, Kurt Freiburghaus cites 10 million for hardware, and 10 million for project servicing. Of course, the same figures were cited by both sides a year ago, at half-time in the operational test, so that it can be assumed that the actual amount today is probably closer to 150 million.

WELTWOCHÉ polled information suppliers, PTT, equipment suppliers and the trade for their explanation of the poor response by the public. Almost every time, the "chicken-egg effect" was mentioned: because of a lack of participants, it does not pay suppliers to develop costly programs, and in turn, the present supply is not attractive enough to persuade potential customers to join up. PTT-man Kurt Freiburghaus: "A process of mutual stimulation must take place."

In talks, the following explanations and accusations came up (summarized here):

--PTT is being accused of doing little or nothing to implement and market Videotex. Originally planned public terminals (in large post offices) were not installed because of a fear of vandalism. Whoever gets interested in taking part in the operational test immediately is discouraged by PTT through a voluminous paper war. Even PTT tariff policy is being criticized --12 francs monthly hook-up dues (modem rent, and in addition, 20 francs telephone user fee) are too much, and even actual use at 10 centimes for 48 seconds (neighboring telephone zone tariff) is too expensive. Many SVIPA members point to the example of France where everyone doing without a printed telephone book gets a free Videotex terminal installed. Teletel, its French name, thus became popular very rapidly. At the moment, there are about 1 million subscribers, and every month, believe it or not, there are 100,000 more. Due to this implementation strategy, France is the only country where Videotex is accepted by the public. In the FRG (TV screen text) and Great Britain (Prestel), the postal service is faced with a similar disinterest as is the Swiss PTT. But our postal people now announced in May 1985 that, in a one-time action, they would release 500 terminals on a rental basis--with the very transparent intention to raise participants to the magic number of 2,000. The equipment went speedily (mostly to commercial users, however), although the rent of 43 francs per month is relatively high (plus 12 francs modem rent and 20 francs for telephone connection).

--PTT man Kurt Freiburghaus lightly puts the blame back on the suppliers. "At the moment, only 30,000 pages have been stored. That is much too little. First of all, the suppliers must offer more attractive programs. With the chance of a good dialogue, interest in Videotex will grow." According to Freiburghaus, many suppliers have not grasped so far what Videotex is, and could be. "Videotex is an interactive medium, its strength are banking and booking. At present, it has too much one-way communication."

(A good example of the positive possibilities of this new medium is the "tax compass" worked out by the editors of BILANZ, which computes the tax burden of 1,600 communities on the basis of income and family situations. Note by the editor.)

Josef Burch, marketing manager of the TAGES-ANZEIGER publishing house and manager of the SVIPA marketing group, is also of the opinion that many suppliers put too much emphasis on graphic displays instead of developing

Videotex methods, i.e., methods of dialogue. Burch: "This is in part due to the fact that in most firms, electronic data processing people are in charge of Videotex, instead of marketing people." Frequently, and this is also true for PTT, only "technical" expenses had been budgeted for the introduction of Videotex: calculators, software, engineers. It had been overlooked that the new medium also has to find a new public. PTT, SVIPA, and the trade now--rather late--had had an advertising strategy developed which is to reduce "the confused picture of Videotex in the public's mind." Among other things, a large advertising campaign is planned for this fall, and the introduction of an optical symbol for Videotex, as well as placing several dozen public terminals in banking halls and in the malls of shopping centers. These terminals for touching and testing are to de-mystify Videotex and to demonstrate its practical uses.

--The specialized trade, and the producers of the sets, also play a part in the failure. The association of TV dealers protested loudly in May, when PTT encroached on their territory by leasing out Videotex equipment; but with few exceptions, the dealers themselves have done nothing so far to help popularize Videotex. And a small test showed that there are still salesmen who cannot distinguish between Videotex and Teletext (TV screen text).

In the trade, also, there is the chicken-egg effect. For the time being, Videotex brings no revenues and is, therefore, not being promoted--and vice versa. At present, big sales items are stereo television sets and personal computers. At "fera," Videotex was hardly topical. The few television sets that can handle Videotex are expensive and not to be had for less than 3,000 francs. Eschenmoser in Zurich, Switzerland's largest discount store, so far has sold "two or three Videotex sets at most." Klaus Schrape, communications specialist of Basle Prognos, estimates that in the purchase of a television set, the extra cost for Videotex must not exceed 200 francs at most in order to be eliminated as an inhibiting factor. At this time, the decoder still costs 1,000 francs, and (optional, but highly recommended) the alpha-numerical keyboard sells at 600 francs.

--And lastly, Videotex does have some system-inherent drawbacks. Several seconds pass until one page is set up on the participant's screen, and the more complicated the graphic lay-out, the longer it takes. And patience is needed to get the desired information, especially if one has to scan 10 pages in a row in order to find it. A second great shortcoming: creative possibilities are very limited, and Videotex is a "cold" medium. It is impossible to approach a participant emotionally, to entice him, as can be done by a mailing or a color advertisement.

Computer Access

Videotex can best be described as popular computer access. The participant can communicate with the computer of a supplier with his Videotex terminal, or with his appropriately equipped television set. He can call their information to his screen, can book vacation quarters, order newspaper subscriptions, charge something to his bank account, or order

consumer goods of all types. The connection goes via the telephone network to the PTT Videotex central office where the participant is connected with the supplier's external computer. Thus PTT only performs the function of a dialing service; earnings come from the use of the telephone network.-- Videotex has been tried in Switzerland in a pilot operation since 1979, and in an operational test since 1983.

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